MODEL

SERVICE MANUAL

**SERVICE MANUAL** 

AEP Model Chassis No. SCC-B14H-A



AE-1 CHASSIS

Note: The service manuals for RM-673 have been issued separately.

MODELS OF THE SAME SERIES			
KV-X25TD	KV-X21TD		
KV-25XSD	KV-21XSD		
KV-25XSTD	KV-21XSTD		

### **SPECIFICATIONS**

Television system

Color system

Stereo system

Channel coverage

CCIR B, G and H PAL SECAM

German two carrier system VHF channels E2-E12

UHF channels E21-E69 Cable TV channels S1-S20

(a total of up to 30 preselected channels)

Picture tube

Trinitron tube

110-degree deflection

Approx. 63.5cm (25 inches)

(Approx. 59cm picture measured diagonally) 21-pin connector: CENELEC standard

Inputs Outputs

21-pin connector: RGB input unconnected

Headphones jack: stereo minijack

External speaker terminals: 2-pin DIN

Audio output jack: phonojack output level dependent

upon TV setting

Power consumption

98Wh

**Dimensions** 

Approx.  $587 \times 522 \times 460 \text{mm} \text{ (w/h/d)}$ 

Weight

Approx. 35.5kg

Supplied accessories

RM-673 Remote Commander (1)

IEC designation R6 batteries (2)

Sound output

10W+10W (music power)

Design and specifications are subject to change without notice.





### TABLE OF CONTENTS

Section	<u>Title</u>	Page	Section	Title	Page
1. GENERAL  1-1. First of All			5. DIAGRAM  5-1. Block Diagram		
3-4. White  4. CIRCUIT A  4-1. B B  4-2. D B  4-3. A B  4-4. J1 E  4-5. V B	DJUSTMENTS  oard Adjustments  oard Adjustments  oard Adjustments  oard Adjustments  oard Adjustments  Adjustments  Adjustments	151617171818			

### SAFETY-RELATED COMPONENT WARNING!

COMPONENTS IDENTIFIED BY SHADING AND MARK 

ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

### **SECTION 1 GENERAL**

Note) The layout, etc., will be slightly different from the operating instructions packed with the units.

### 1-1. FIRST OF ALL

- Connect the aerial to the  $\ensuremath{\mathbb{T}}$  socket on the rear of the This socket receives the standard 75-ohm aerial plug.
- Plug in the set.
- 3 Tune in the available channels.

Use the buttons inside the front panel. To open the panel, press the center.

To tune in all channels automatically:

- Press ♦ (Preset)
- Press PROGR to select the program position from which tuning is to start.
- Press (Auto programing).

The channels will be tuned in and memorized in consecutive positions, beginning from the program position selected in

When tuning has been completed, the set returns to the position where tuning began.

To tune in a channel in any desired program position.

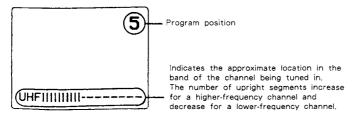
- (e. g. the position with the same number as the channel):
- Press PROGR to select the desired program position.
- Press C (Clear).
- Press (Search) repeatedly until the desired channel appears.
- 5 Repeat steps 2 to 4 for all channels, if required.
- Press  $\otimes$  (Preset) again.

If the set is to be used in an area with poor reception, preset the program numbers between 1 and 19 for TV program use.

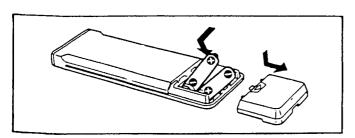
To have the unused program positions skipped when PROGR+ or PROGR− is pressed 1 Press ♦ (Preset).

- Press PROGR to select the unused position.
- Press C (Clear).
- Repeat steps 2 and 3 for all unused position.
- Press  $\otimes$  (Preset) again.

### On-screen display while tuning

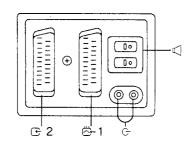


Insert two R6 batteries checking the correct polarity.



### 1-2. CONNECTING OTHER EQUIPMENT

connectors on rear set



L·G/S	Left external speaker terminal (2-pin DIN)	Connect to external speakers The TV speakers will be disconnected.	
R/D/D	Right external speaker terminal (2-pin DIN)	Speaker 8-16Ω.	
R/D/D	Right audio output jack (Phono jack)	Connect to audio equipment. When only using the phono— jack, two loudspeaker plugs, (DIN 41529) should be inserted	
L/G/S	Left audio output jack (Phono jack)	into the external speaker terminals so that the TV speaker output is switched off.	
<b>⊘</b> -1	21 - pin connecter (CENELEC standard)	Connect to a VTR micro computer, etc.	
		The picture of the TV channel being received is always output. The picture of ⊕ 2 can be watched while recording a TV program with the VTR connected to ⊕1.	
G 2	21—pin connecter (without RGB inout)	Connected to a second VTR. The picture displayed on the screen is always output. The picture of E-1 can be recorded with the VTR connected to E-2 while monitoring the picture.	

VTR operation using the supplied Commander Remote operation of the VTR (8mm only) is limited to the features and functions of the VTR. For further details, refer to the VTR manual. When watching a video with the VTR connected to the connector, set the channel for the video to the program number 0 or any empty channel between 20 and 29.

### Note

Move the VTR away from the TV, if the picture or sound is distorted.

### 21 Pin Connector ( ⊕ 1, ⊕ 2)

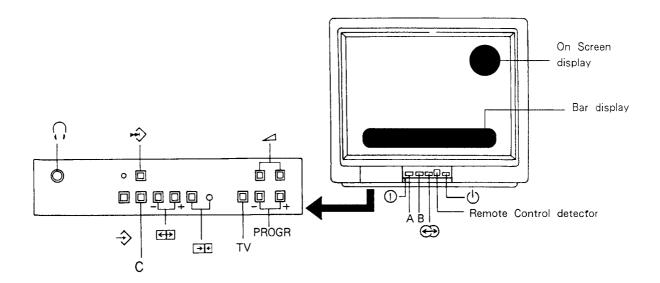
Pin No	1	2	Signal	Signal level		
1	0	0	Audio output B (right)	Standard level: 0.5 Vrms Output impedance: Less than 1 k ohm*		
2	0	0	Audio input B (right)	Standard level: 0.5 Vrms Input impedance: More than 10 k ohms*		
3	0	0	Audio output A (left)	Standard level: 0.5 Vrms Output impedance: Less than 1 k ohm*		
4	0	0	Ground (audio)			
5	0	0	Ground (blue)			
6	0	0	Audio input A (left)	Standard level: 0.5 Vrms Input impedance: More than 10 k ohms*		
7	0	•	Blue input	0.7 V ±2 dB, 75 ohms, positive		
8	0	0	Function select (AV control)	High state (9.5-12 V): Part mode Low state (0-2 V): TV mode Input impedance: More than 10 k ohms Input capacitance: Less than 2 nF		
9	0	0	Ground (green)			
10	0	0	Open			
11	0	•	Green/Green with sync input	Green signal: 0.7 V $\pm 2$ dB, 75 ohms, positve Green with sync signal: 1 V $\pm 2$ dB, 75 ohms, positve		
12	0	0	Open			
13	0	0	Ground (red)			
14	0	0	Ground (blanking)			
15	0	•	Red input (Same as Pin 7)			
16	0	•	Blanking input (Ys signal)	High state (1-3 V) Low state (0-0.4 V) Input impedance : 75 ohmes		
17	0	0	Ground (video output)			
18	0	0	Ground (video input)			
19	0	0	Video output	1 V ±2 dB, 75 ohms, positive Sync: 0.3 V (-3, ±10 dB)		
20	0	0	Video input	1 V ±2 dB, 75 ohms, positive Sync: 0.3 V (-3, ±10 dB)		
	1			Common ground (plug, shield)		

O connected

• unconnected (open)

\* at 20 Hz-20 kHz

### 1-3. FUNCTION OF CONTROLS



### On the set

### On-screen display

Indicates program numbers and G input modes.

### Bar display

Indicates the level of  $\triangle$  volume, 3 color,  $\overleftrightarrow{\triangle}$  brightness, 3 contrast, 9: bass, 4 treble and  $\trianglerighteq$  balance.

### Note on $\triangle$ function.

When the volume is at the minimum setting the balance and function will not operate.

### ① Power switch

To cut off the mains power completely, press this switch. Depress the power switch fully to ensure correct operation of the set.

### Note

To ensure correct operation, push the switch in fully.

### () standby indicator

Lights up brightly when the set is in the standby mode.

### Note

If the main power is turned off when in standby mode, the standby indicator will take 2 to 6 seconds to go off.

### @ space sound indicator

Lights up when @ on the Remote Commander is pressed.

### A/B indicators

One of them lights during bilingual broadcast. (Choose A or B with the Remote Commander.)

Both light during stereo broadcast. In AV mode, A lights for left channel, B for right channel, or A and B for both channels.

### Remote control detector

Point the Remote Commander towards this detector.

### Inside the panel

### ∩ headphones jack (stereo minijack)

### 

Press to fine tune a weak channel manually, if required. When  $\boxdot$  (SEARCH) pressed, the  $\boxdot$  indicator (AFT) goes off and the AFT cricuit does not function on the selected channel.

To restore the AFT circuit on this channel, press (AFT) so that the indicator lights up.

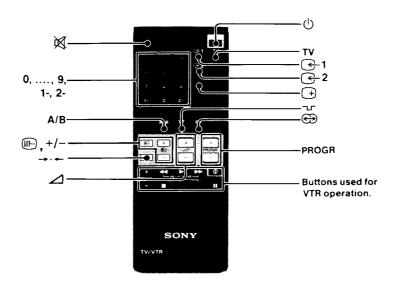
### ■ AFT button and indicator

The AFT circuit automatically fine tunes the channel for the best possible picture.

### ∠ volume buttons

PROGR+, PROGR- program scan buttons

### **FUNCTION OF CONTROLS**



### On the Remote Commander

To operate the Commander, point it toward the remote control detector.

### M mute button

### 0, ...., 9, 1-, 2- buttons

To tune into:
program 15, press 1- and 5
program 25, press 2- and 5

Press to select the language in a bilingual broadcast, or to select the channel in AV mode.

### ⊕ + / - analog select buttons

Press 🖭

will appear on the screen. Adjust by pressing + or −.
Press ⊕ again and adjust ③ (color), then ☼ (brightness),
(bass), § (treble) and ∠ (balance).

### →·←reset button

Press to reset color and contrast and brightness to factoryset levels.

# () standby button

Press to change to the standby mode. Use this button to

turn off the set for short periods of time. To turn on the set, press TV or the program number; there will be a slight delay before the picture is restored.

If the main power is turned off when in standby mode, the standby indicator will take 2 to 6 seconds to go off.

### TV button

Press to change to the TV mode from the standby or 🕒 input modes.

### ⊕ 1 input button

Press to view the input picture coming in through the 🗀-1

Press to view the input picture coming in through the G 2 

### 

Press to make the display appear on the screen. Press again to make them disappear.

### ਾ loudness button

Press to emphasize high and low notes.

### en space sound button

Press to obtain special acoustic effects.

### ∠ volume buttons

### PROGR program scan buttons

### Note

Buttons not referred to on this page or next page do not operate.

### 1-4. VIEWING TELETEXT

To view the teletext service, use the Remote Commander. The buttons for teletext operation are indicated in green.

### Operation

- Select the TV channel for the desired teletext service.
- Press / ② (TEXT / MIX) to display the teletext service.

Once 1 / D has been pressed, the TV channel cannot be changed.

Key in the three digits for the desired page using the number buttons. If an error is made, complete the three digit sequence by keying in any digit. Then re-enter the correct page number. The requested teletext page is displayed.

To return to the TV mode, press TV on the remote commander.

The teletxet service can be displayed directly from the standby mode, by pressing 1 /2.

To receive the teletext service of a different TV channel.

- Press TV to return to the TV mode.
- Select the desired TV channel. Press /☑

### Note

To receive the teletext service accurately, keep 34 inside the panel switched on during teletext

### To display the index page.

Press (INDEX).

If the necessary signal is not being broadcast, page 100 is displayed.

To rapidly access the next or preceding page press® (PAGE+) or ® (PAGE-).

To superimpose the teletext display on the TV picture. Press 🖹 / 🗗 twice from TV mode. Press again to return to the TEXT display.

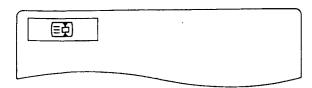
To suppress the teletext display so that the TV picture is displayed.

Press (TEXT CL).

This button can be operated from both the TEXT and MIX displays.

To prevent a teletext page (subpage) from being updated /changed.

Press B HOLD. The HOLD symbol appears at the top of the screen



To resume normal teletext reception, press 🖹 / 🗗.

To enlarge the teletext display.

Press .

Press once to enlarge the upper half of the display; press again to enlarge the lower half of the display; press again to return to the normal display.

To reveal concealed infomation such as the answers to a quiz

Press (REVEAL)

Press again to conceal the answers.

To adjust the contrast of the teletext display. When in teletext mode, adjust by using the + or -keys adjacent to the E key.

To watch the TV program while waiting for a requested page to be displayed.

Request new page.

Press 12 to watch the TV program.

The requested page number appears at the top left of the screen.

When the requested page has been captured, the page number is desplayed in the top left hand corner of the screen.

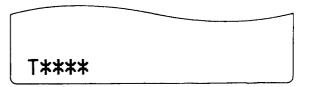


To view this page, press Ē / Ø.

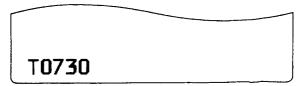
To have a requested page displayed at a predetermined time.

- Request a time coded page (e.g. alarm page).

Press ® (TP ON).
"T\*\*\*\* will appear at the bottom of the screen.



Enter your request time with the number buttons, using four digits. For example, 07:30.



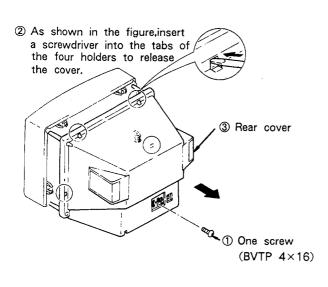
To watch the TV program until the requested time, press . At the requested time, the page number will be displayed at the botton of the screen.

To view this page, press 🗉 / 🗷.

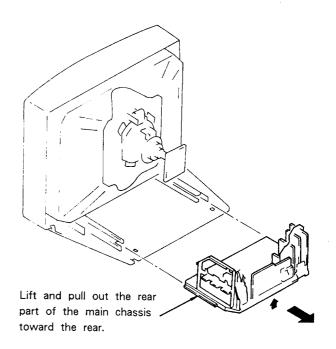
To cancel the request, first ensure that the telebxt page is displayed, then press (TP OFF).

# SECTION 2 DISASSEMBLY

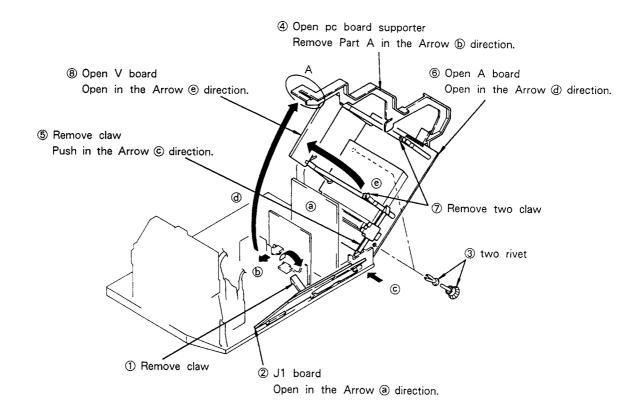
### 2-1. REAR COVER REMOVAL



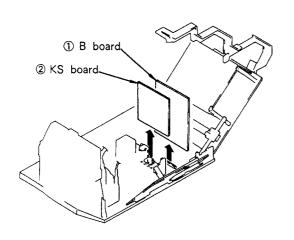
### 2-2. CHASSIS ASSY REMOVAL



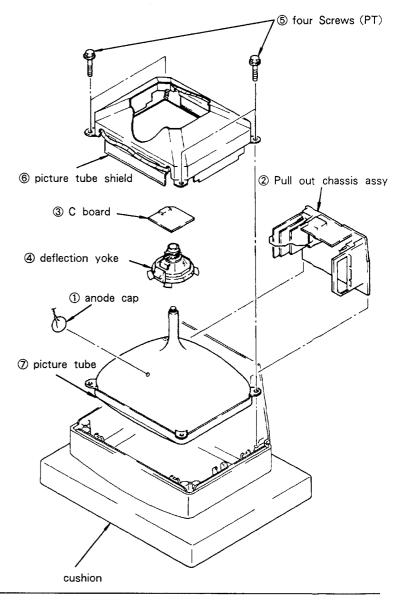
### 2-3. J1,A, AND V BOARD REMOVAL



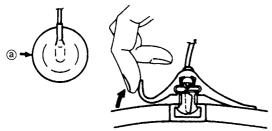
### 2-4. KS AND B BOARDS REMOVAL



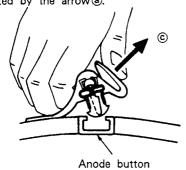
### 2-5. PICTURE TUBE REMOVAL

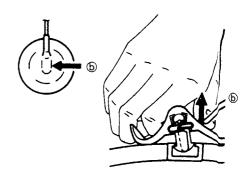


### Removing Procedures



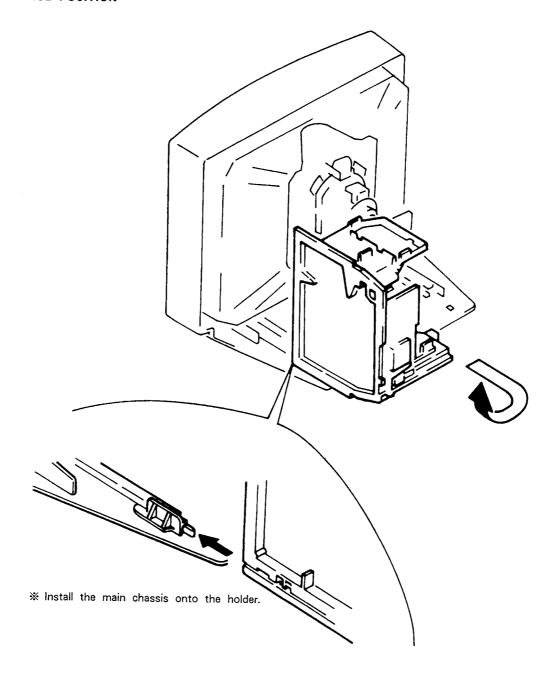
① Turn up one side of the rubber cap in the direction indicated by the arrow ②.





- ② Using a thumb, pull up the rubber cap firmly in the direction indicated by the arrow **(b)**.
- When one side of the rubber cap is separated from the anode button, the anode cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ©.

### 2-6. SERVICE POSITION



# **SECTION 3 SET-UP ADJUSTMENTS**

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

The control and switch below should be set as follows unless otherwise noted:

● CONTRAST control ······ 80% (or Normal by Commander)

☆BRIGHTNESS control ··· 50%

Perform the adjustments in order as follows:

- 1. Beam Landing
- 2. Convergence
- 3. Focus
- 4. White Balance

Note: Test Equipment Required.

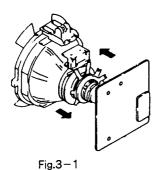
- 1. Color Bar/Pattern Generator
- 3. DC Power Supply
- 4. Digital multimeter
- 5. Oscilloscope

### 3-1. **BEAM LANDING**

- 1. Input a raster signal with the pattern generator. CONTRAST } normal **BRIGHTNESS** J
- 2. Turn the raster signal of the pattern generator
- 3. Move the deflection yoke backward, and adjust with the purity control so that red is in the center and blue and green are at the sides, evenly.

(Fig. 
$$3-1 \sim 3-3$$
)

- 4. Move the deflection yoke forward, and adjust so that the entire screen becomes red. (Fig. 3-1)
- 5. Switch over the raster signal to blue and green and confirm the condition.
- 6. When the position of the deflection yoke is determined, tighten it with a deflection yoke mounting screw.
- 7. When landing at the corners is not right, adjust by using the magent. (Fig. 3-4)





- 2. Degausser

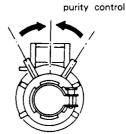


Fig.3-2

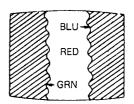
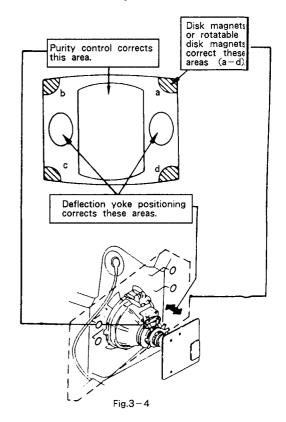


Fig.3-3

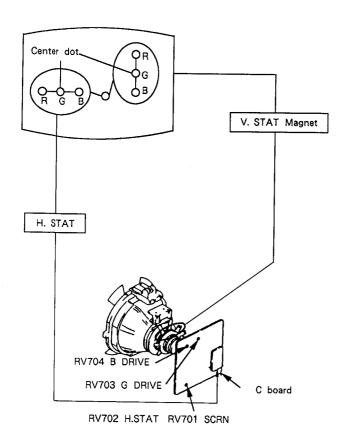


### 3-2. CONVERGENCE

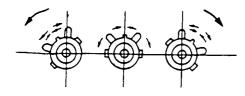
### Preparation:

- Before starting, perform FOCUS, H. SIZE and V. SIZE adjustments,
- Set BRIGHTNESS control to minimum.
- Feed in the dot pattern.

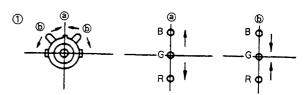
# (1) Horizontal and Vertical Static Convergence

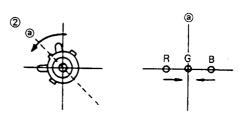


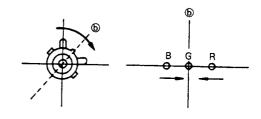
- 1. Adjust H. STAT VR to coincide red, green and blue dots on the center of screen. (Horizontal movement)
- 2. Adjust V. STAT magnet to coincide red, green and blue dots on the center of screen. (Vertical movement)
- 3. If the red, green and blue dots do not coincide on the center of screen with H. STAT VR, perform horizontal convergence adjustment using H. STAT VR and V. STAT magnet as shown below. (In this case, H. STAT VR and V. STAT magnet effect each other.)
- Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.

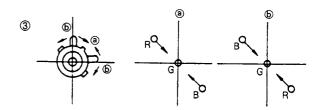


4. When the V. STAT magnet is moved in the direction of arrow (a) and (b), red, green and blue dots move as shown below.

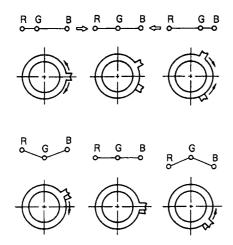






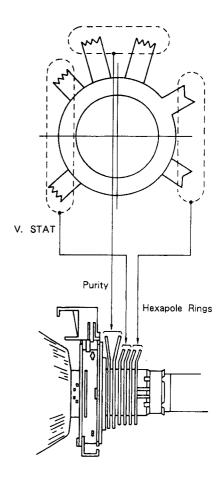


### • Operation of Hexapole Ringed Magnet



The respective dot operations resulting from the operation of each magnet are not completely independent, so be sure to perform adjustment while tracking.

Use the H, STAT VR to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).

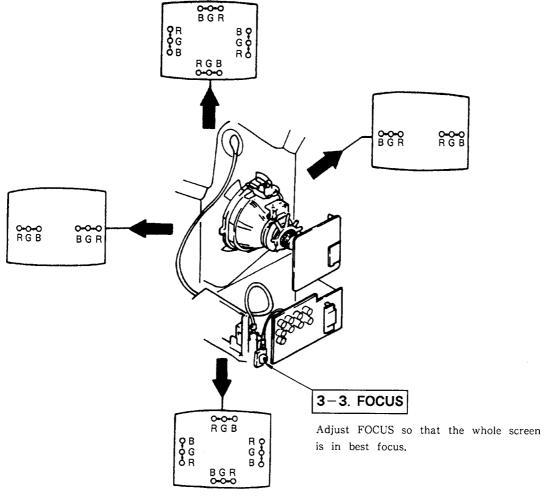


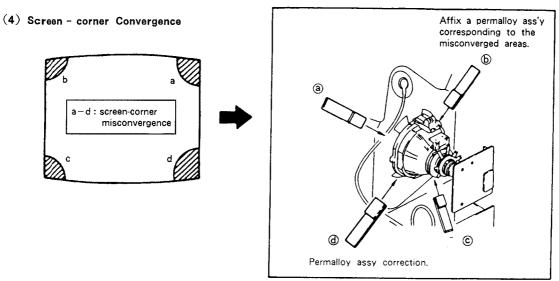
### (3) Dynamic Convergence Adjustment

### Preparation:

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment..
- 1. Slightly loosen deflection yoke screw.
- 2. Remove deflection yoke spacers.

- Move the deflection yoke for best convergence as shown below,
- 4. Tighten the deflection yoke screw.
- 5. Install the deflection yoke spacers.





### 3-4. WHITE BALANCE

### (Screen (G2) Setting)

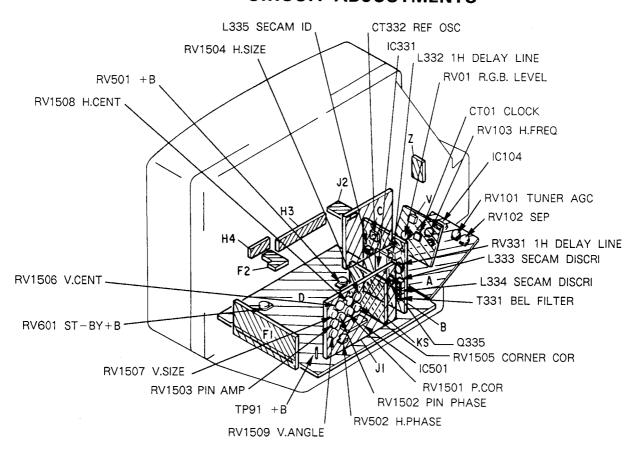
- 1. Input dot signals from the pattern generator.
- Set the picture BRIGHTNESS control to the minimum level,
- 3. Apply 170 V dc to the cathodes of R, G, and B from an external power source.
- While watching the picture, adjust the G2 volume (RV701) immediately before the fly-back line disappears.

### (White Balance Adjustment)

- 1. Input all-white signals from the pattern generator.
- 2. Adjust the BRIGHTNESS and COLOR controls to the standard level.
- 3. Adjust the white balance using RV704 (B DRIVE) and RV703 (G DRIVE).

In the following adjustments, the CONTRAST COLOR and BRIGHTNESS controls are set to normal unless otherwise specified.

# SECTION 4 CIRCUIT ADJUSTMENTS



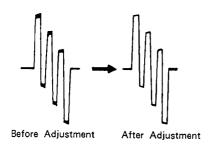
### 4-1. B BOARD ADJUSTMENTS

### REF OSC Adjustment (CT332)

- 1. Input a PAL COLOR BAR pattern.
- 2. Short circuit between pin @ of IC331 and ground.
- 3. Adjust CT332 to obtain color synchronization.
- 4. Remove a jumper wire from IC331.

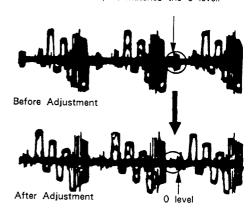
### 1H DELAY LINE Adjustment (L332, RV331)

- 1. Input a PAL COLOR BAR pattern.
- 2. Connect the oscilloscope to pin ③ (B-Y) of IC331 and observe the waveform of the H block on the oscilloscope.
- 3. Adjust L332 to minimize the double waveform outline,



- 4. Input a PAL TEST COLOR BAR pattern.
- 5. Rotate the RV331 control and adjust till the ANT PAL of the waveform matches the 0 level.

This part matches the 0 level.



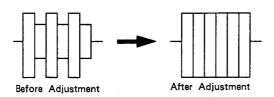
6. L332 and RV331 affect each other. Repeat till the conditions of both meet.

### SECAM ID Adjustment (L335)

- 1. Input SECAM COLOR BAR signal.
- 2. Connect a Digital Multi meter at pin 2 of IC331.
- Adjust L335 so that the indicater goes up to the maximum.

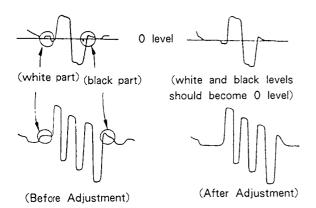
### BELL FILTER Adjustment (T331)

- 1. Input SECAM COLOR BAR pattern.
- 2. Connect an oscilloscope to the emitter of Q335.
- 3. Adjust T331 so that the waveform becomes flat.



### SECAM DISCRI Adjustment (L333, L334)

- 1. Input SECAM COLOR BAR pattern.
- 2. Connect an oscilloscope at pin ① of IC331.
- 3. Adjust L333 so that white and black part of the waveform of pin ① becomes 0 level.
- 4. Connect an oscilloscope at pin 3 of IC331.
- 5. Adjust L334 so that white and black part of the waveform of pin 3 becomes 0 level.



### 4-2 D BOARD ADJUSTMENTS

### +B Adjustment (RV501)

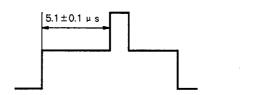
- 1. Connect a Digital Multimeter to TP91.
- 2. Adjust RV501 so that the voltage becomes  $135 \pm 0.2$  V.

### ST-BY +B Adjustment (RV601)

- 1. Set up & standby (Remote Commander) mode.
- 2. Connect the digital multimeter to TP91.
- 3. Adjust RV601 so that the voltage becomes  $135 \pm 3$  V.
- 4. Release the & standby (Remote Commander) mode.

### H. PHASE Adjustment (RV502)

- 1. Input the PAL TEST COLOR BAR pattern.
- Set the CONTRAST and BRIGHTNESS controls to the standard positions,
- Set RV1508 (H, CENT) to the mechanical center position,
- Connect an oscilloscope to pin (I) (SPC OUT) of IC501.
- 5. Rotate RV502 and adjust Block T to  $5.1\pm0.1\,\mu$  s.



### 4-3. A BOARD ADJUSTMENTS

### TUNER AGC Adjustment (RV101)

- 1. Tune in an off-air signal.
- 2. Adjust RV101 so that snow-noise and cross-modulation just disappear from the picture.

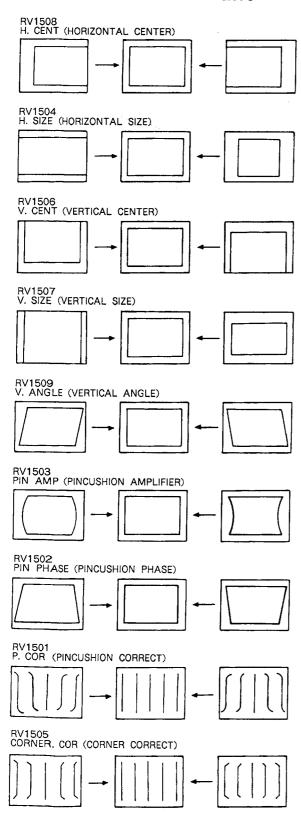
### STEREO SEPARATION Adjustment (RV102)

- 1. Input stereo signal (L-CH 1kHz, R-CH 400Hz)
- 2. Check the stereo indicator.
- Connect an oscilloscope to the pin ① (L) of CNA11 through band pass filter of lkHz,
- Adjust RV102 so that 1kHz voltage goes down to the minimum,

### H. FREQ. Adjustment (RV103)

- 1. Input PAL COLOR pattern.
- 2. Short circuit between pin @ of IC104 and ground,
- 3. Connect a frequency counter to the pin 6 of IC104 through a probe of 10:1.
- 4. Adjust RV103 so that H. frequency becomes  $15.625\pm50$ Hz.

### 4-4. J1 BOARD ADJUSTMENTS



### 4-5. V BOARD ADJUSTMENTS

### Clock Adjustment (CT01)

- 1. Disconnect the V-1 connector.
- 2. Set up the TELE TEXT mode.
- 3. Adjust CT01 to stop pictures from scrolling.

# RGB Level Adjustment (RV01)

- 1. Set PICTURE to maximum.
- 2. Adjust RV01 till the RGB output becomes 0.65V.

### 4-6. SUB ADJUSTMENTS

### SUB BRIGHTNESS Adjustment

- 1. Receive and display a TEST COLOR BAR pattern.
- 2. Push  $\rightarrow \cdot \leftarrow$  on the remote commander to invoke the normal state.
- 3. Turn off the power supply.
- 4. Turn on the power supply while pushing the SUB button (S1414). (SUB mode is invoked.)
- 5. Reduce the ① CONTRAST to the minimum level.
- 6. Adjust the ☆ BRIGHTNESS control until the 0 IRE of the gray scale becomes completely cut off, and the 20 IRE becomes barely luminous.
- 7. Push the AFT button (SUB mode is cleared)

Where no TEST COLOR BAR pattern is available.

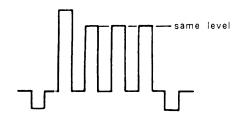
- 1. Display a COLOR BAR pattern.
- 2. Push  $\rightarrow \cdot \leftarrow$  on the remote commander to invoke the normal state,
  - Set the COLOR to normal mode.
  - Steps  $3\sim5$  are the same as above.
- 6. 20 IRE is close to blue, so adjust the 

  ☼ BRIGHTNESS control till blue is faintly luminous.
- 7. Same as Step 7 above.
- 8. Push → ← on the remote commander to invoke the normal state.
- \* When Step 4 is executed correctly, S (SUB mode) is displayed at the upper right of the display. As S is displayed only for 30 seconds, perform the adjustment within 30 seconds, or repeat from Step 4.

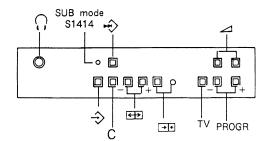
### KV-X25TD RM-673 KV-X25TD RM-673

### SUB COLOR Adjustment

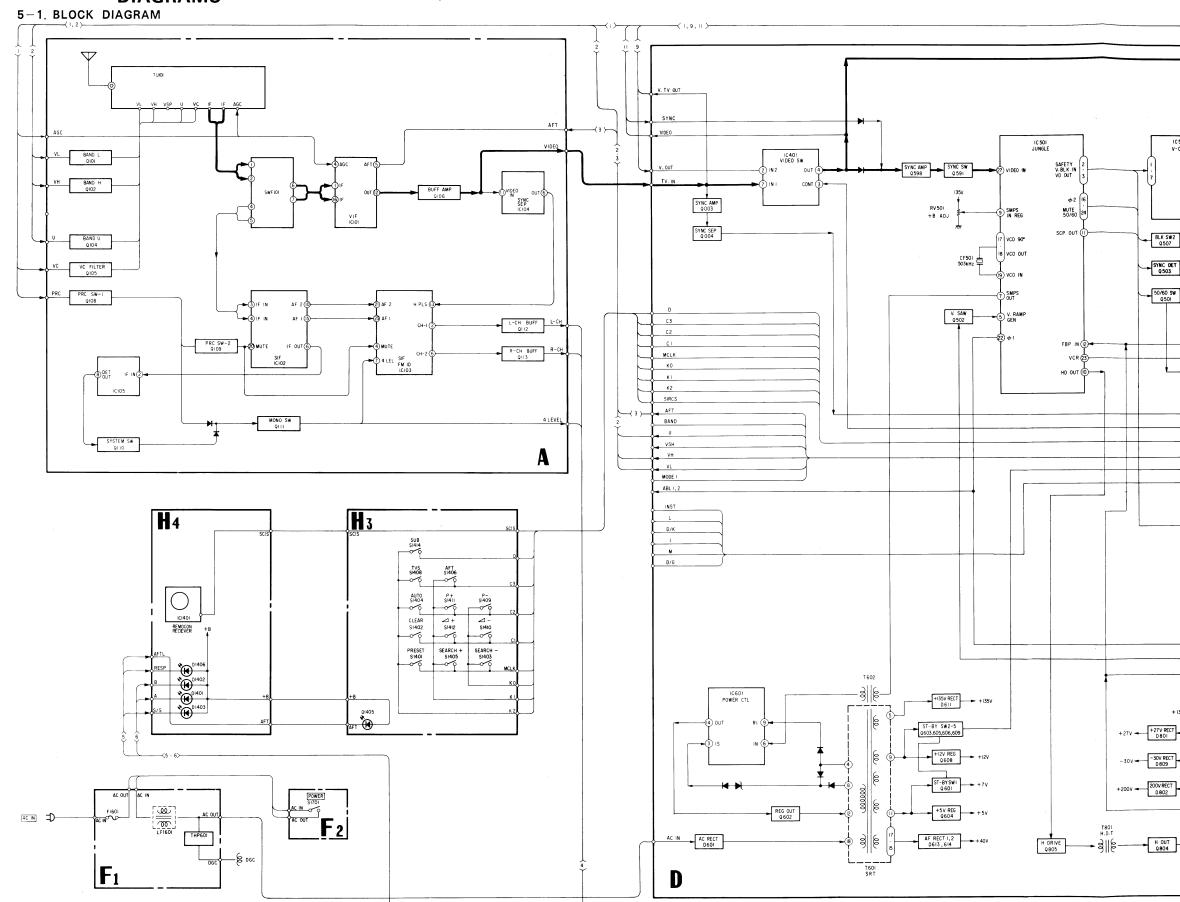
- 1. Display a COLOR BAR pattern.
- 2. Push → ← on the remote commander to invoke the normal state.
- 3. Turn off the power supply.
- 4. Turn on the power supply while pushing the SUB button (S1414). (SUB mode is invoked.)
- 5. Adjust the COLOR control until the B out (pin ② of CNC72 connector on C board) waveform becomes as shown below.
- 6. Push the AFT button.(SUB mode is cleared.)

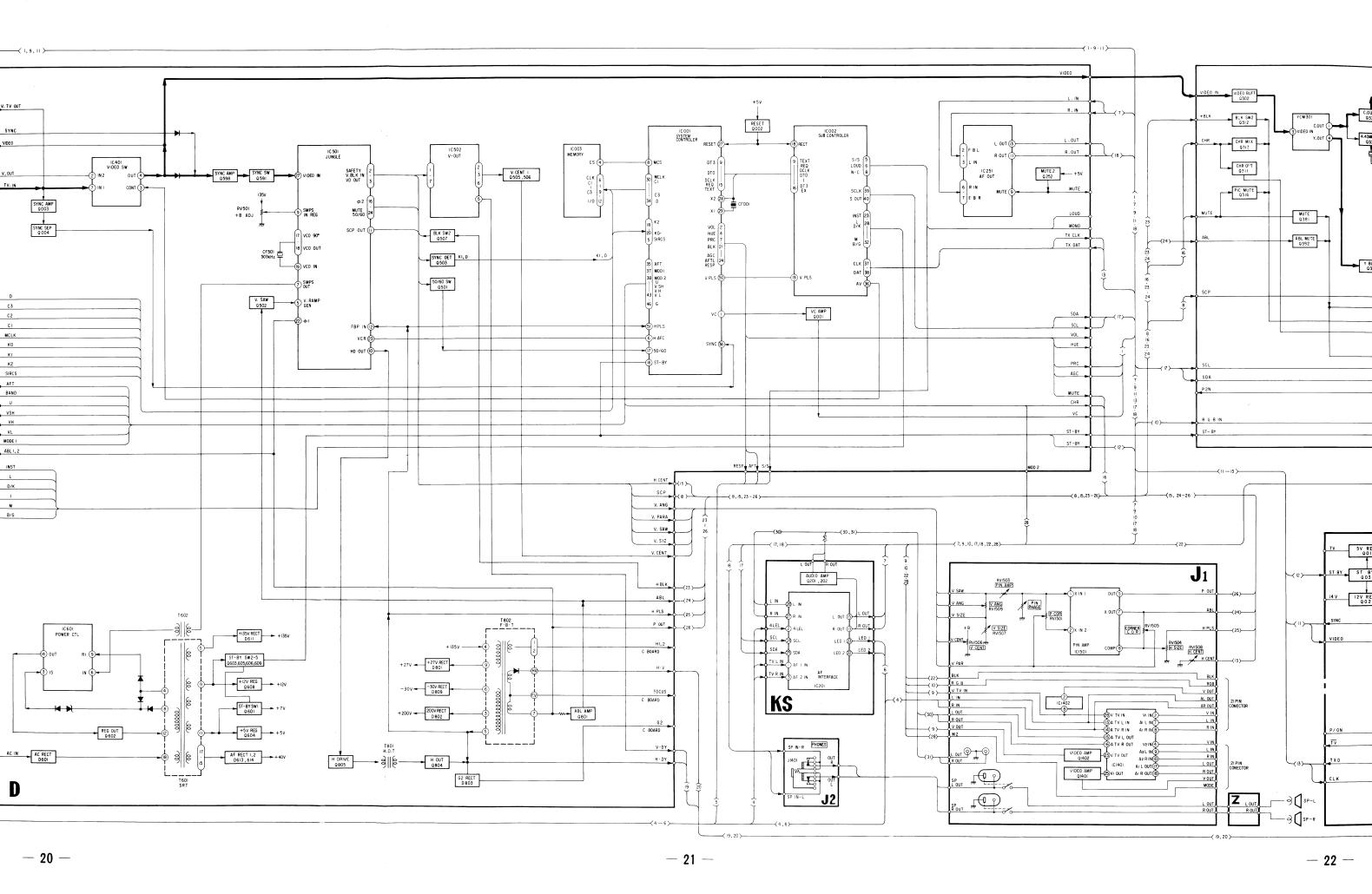


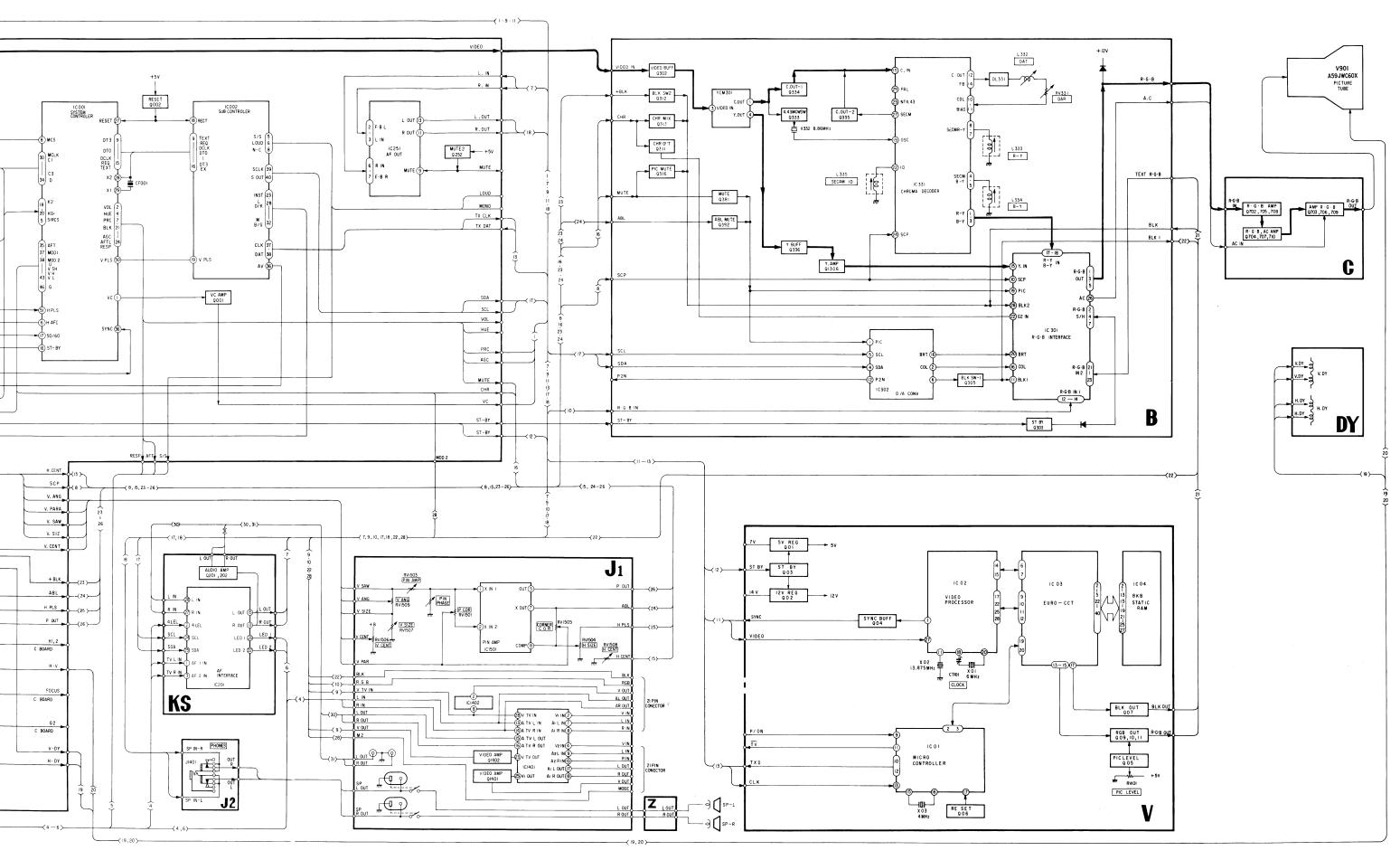
\* When Step 4 is executed correctly, S (SUB mode) is displayed at the upper right of the display. As S (SUB mode) is displayed only for 30 seconds, perform the adjustment with 30 seconds, or repeat from Step 4.



# SECTION 5 DIAGRAMS







KV-X25TD RM-673 **KV-X25TD** RM-673

TUIDI BAND VHF LOW VHF HIGH UHF

CNA15

CNAT

GND

TO D BOARD

RAUDIO

L AUDIO

R AUDIO

GND 1

10

11

507 T 107 T

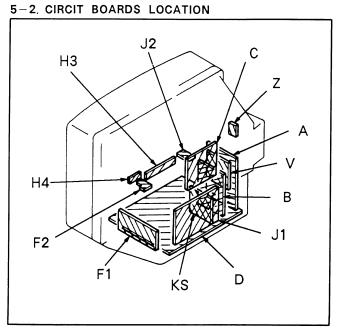
0102 11 DTA114ES

12

# L113

TU101 UV617

**→ A** S S Y Y ¥ → N O E E B = = =



- All capacitors are in μ F unless otherwise noted. pF:μμF 50WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power is as follows.

Pitch : 5mm Rating electrical power: 1/4W

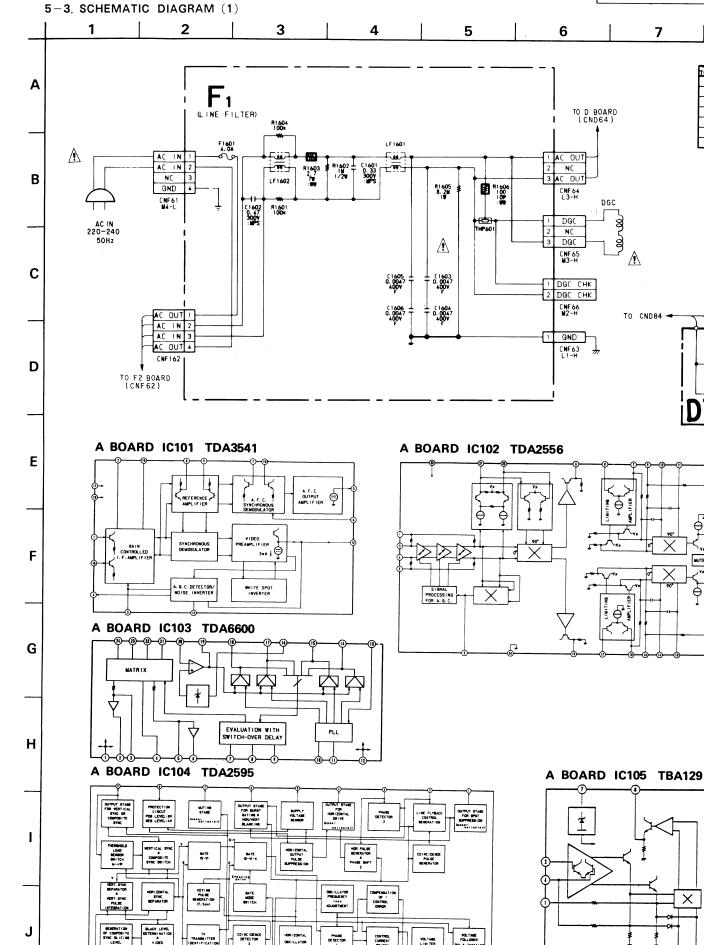
- All resistors are in ohms.
- : nonflammable resistor. • - tusible resistor.
- △ : internal component.
- : panel designation.
- All variable and adjustable resistors have characteristic curve B,unless otherwise noted.
- All voltages are in V.
- ullet Readings are taken with a 10M  $\Omega$  digital multimeter.
- Readings are taken with a PAL color-bar signal input.
- : adjustment for repair.
- Voltage variations may be noted due to normal production tolerances.
- = : B lain
- signal path.

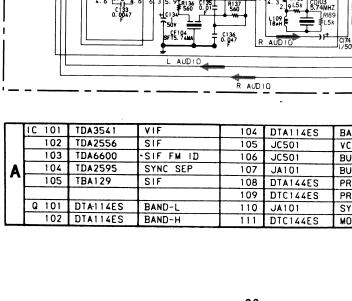
### Reference information

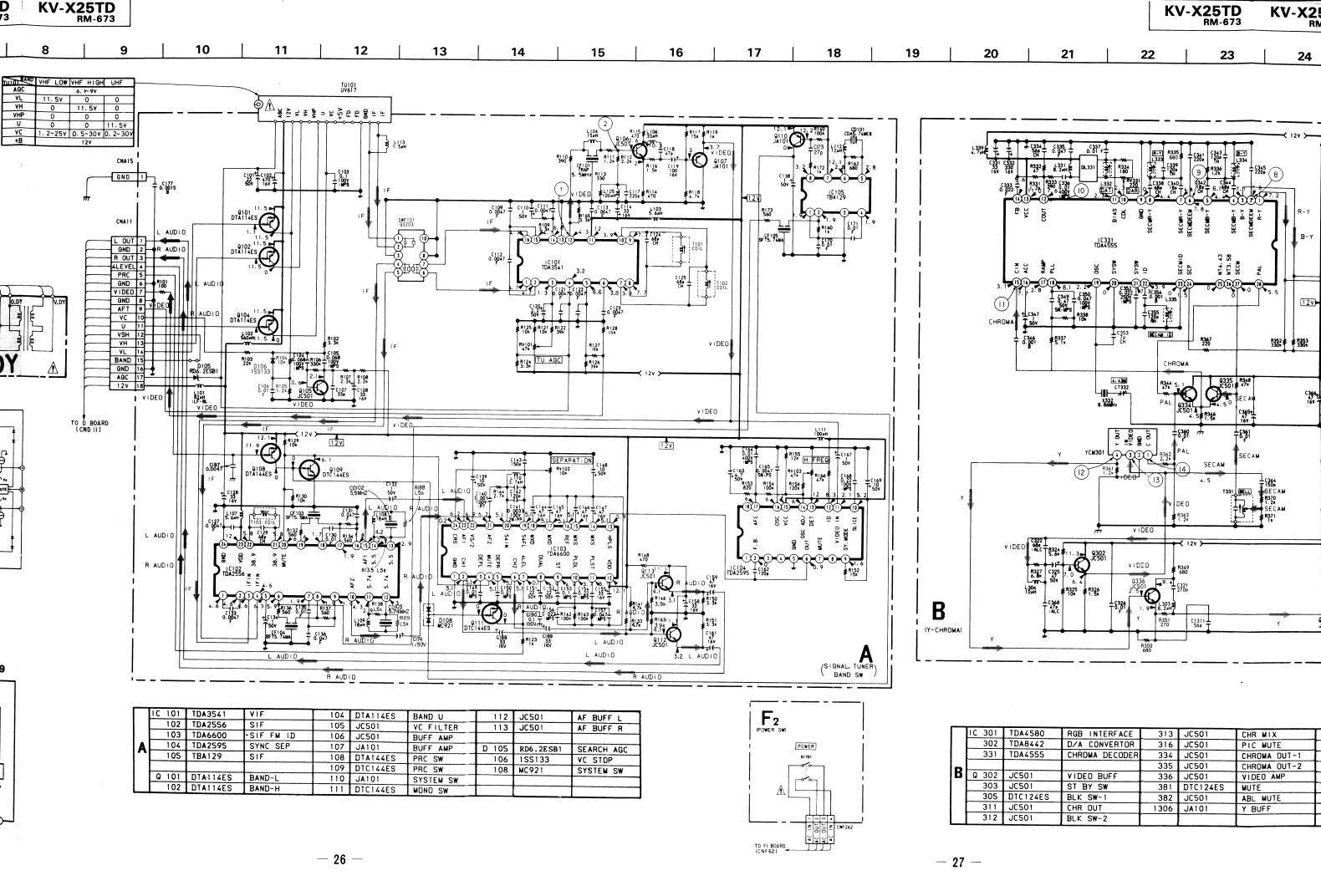
RESISTOR : RN METAL FILM SOLID : FPRD NONFLAMMABLE CARBON NONFLAMMABLE FUSIBLE : FUSE : RS NONFLAMMABLE WIREWOUND : RB NONFLAMMABLE CEMENT MICRO INDUCTOR COIL : LF-8L CAPACITOR : TA TANTALUM : PS STYROL : PP POLYPROPYLENE : PT MYLAR : MPS METALIZED POLYESTER : MPP METALIZED POLYPROPYLENE

: ABL BIPOLAR HIGH TEMPERATURE : ALT HIGH RIPPLE : ALR

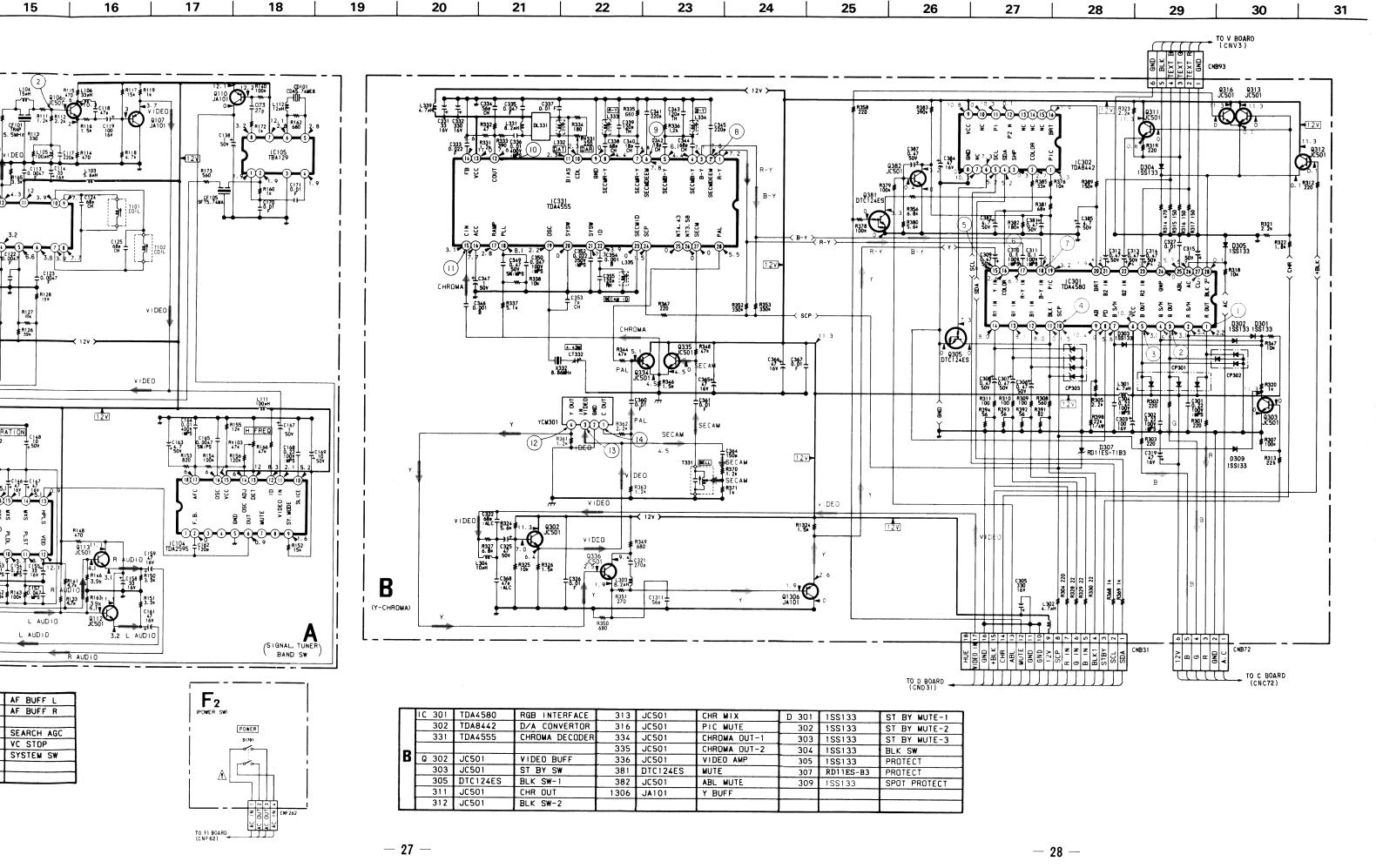
Note: The components identified by shading and mark nare critical for safety. Replace only with part number specified.

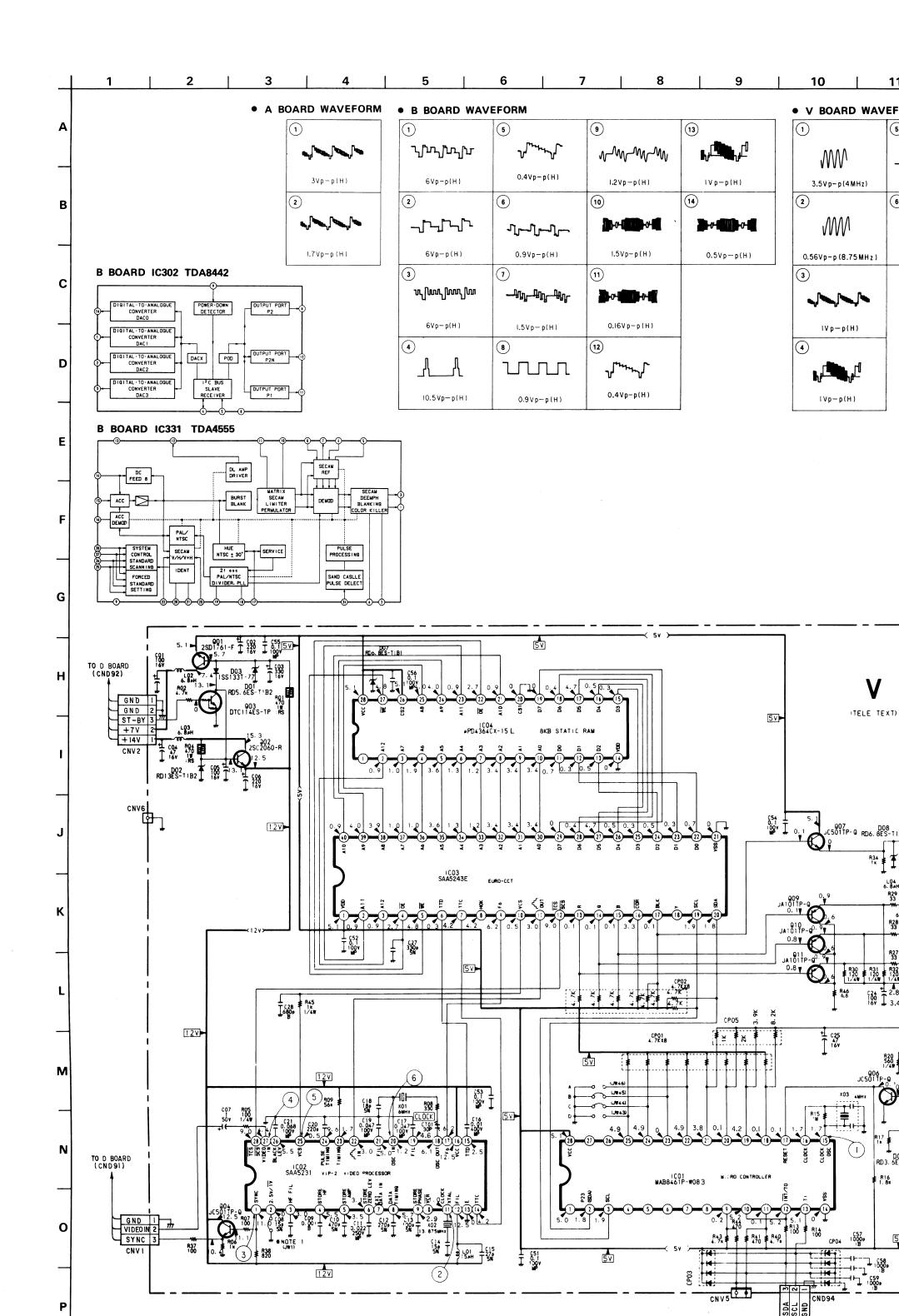


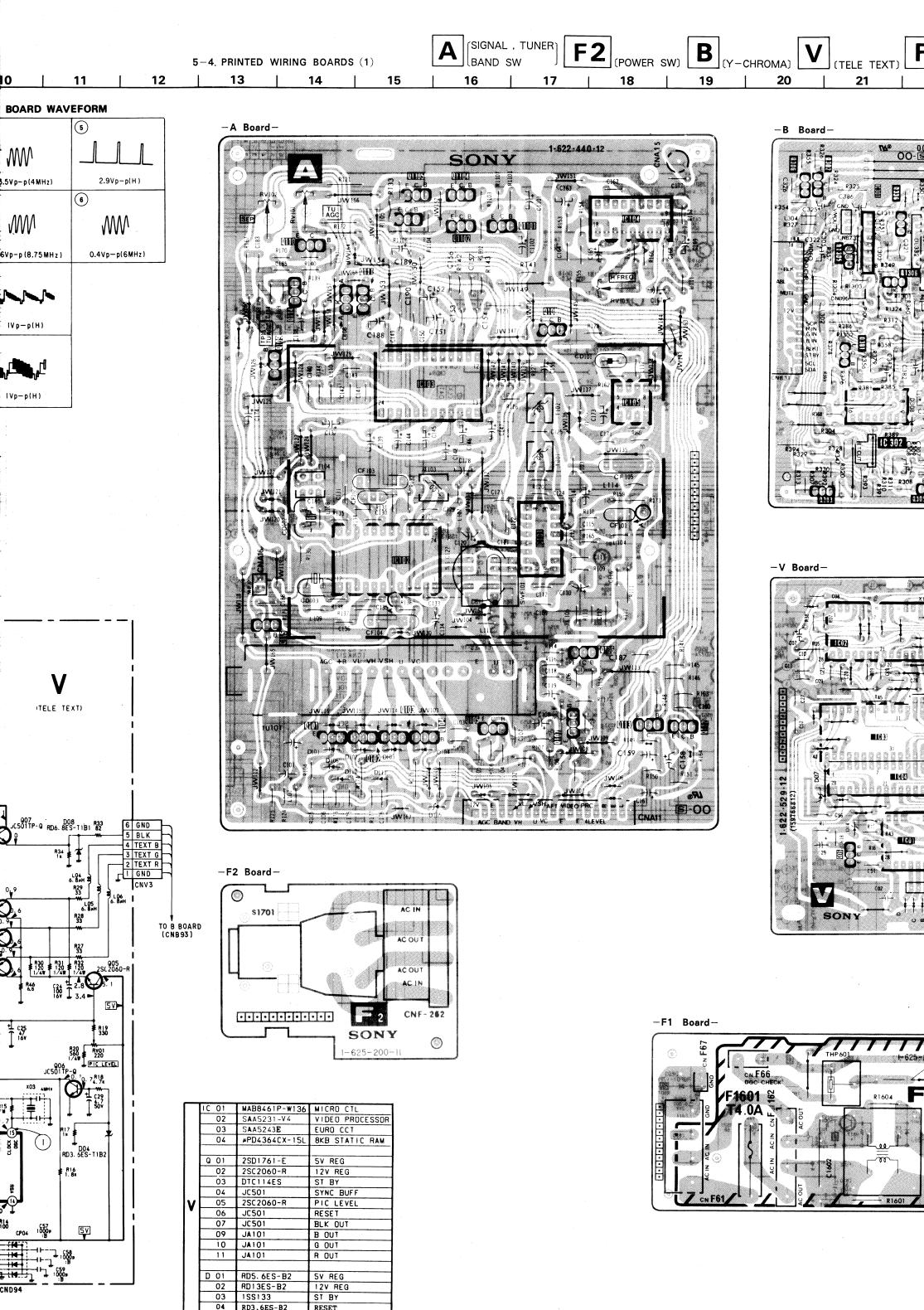


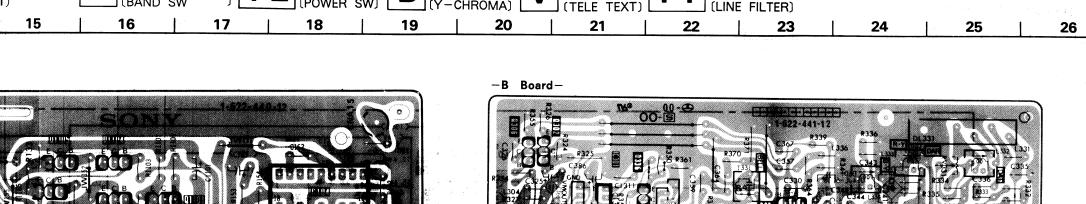


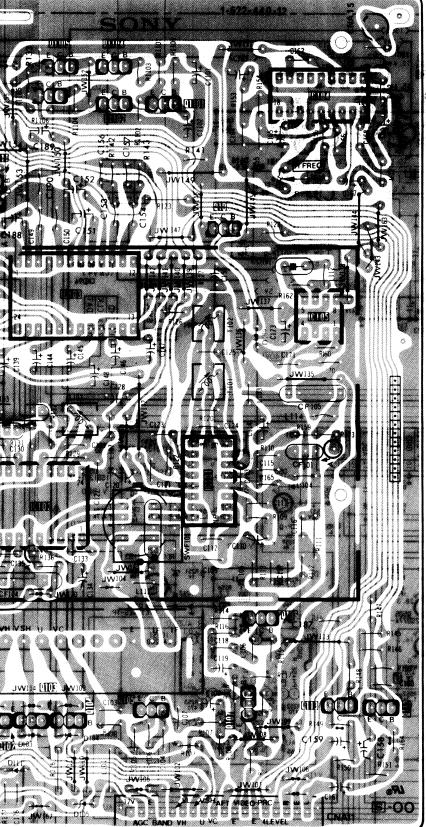
KV-X25TD RM-673 KV-X25TD RM-673

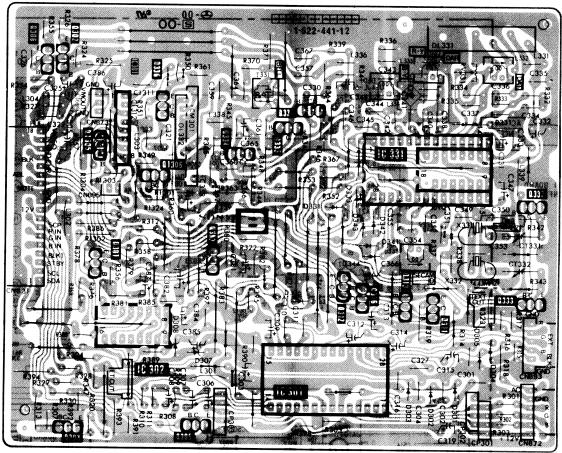


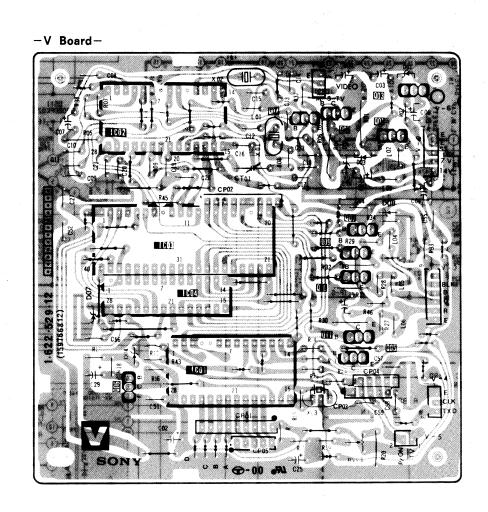


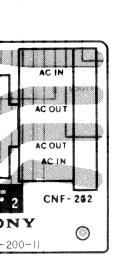






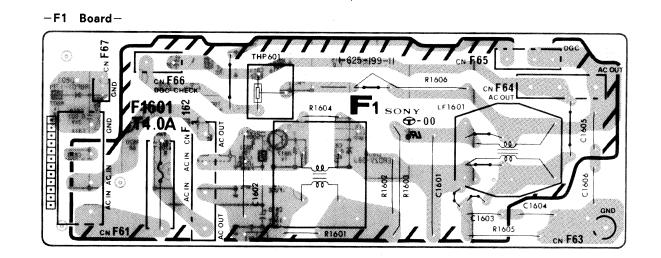


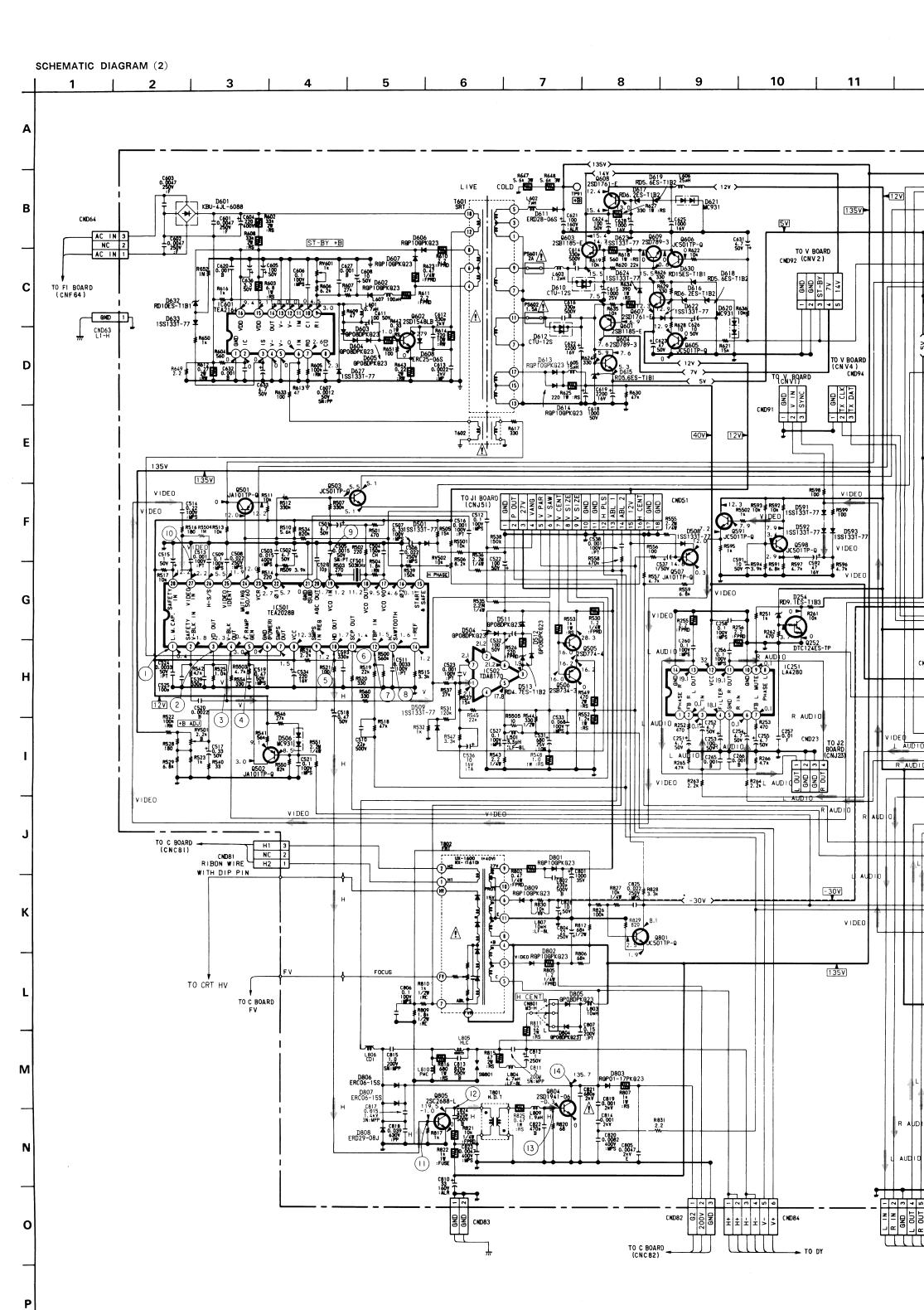


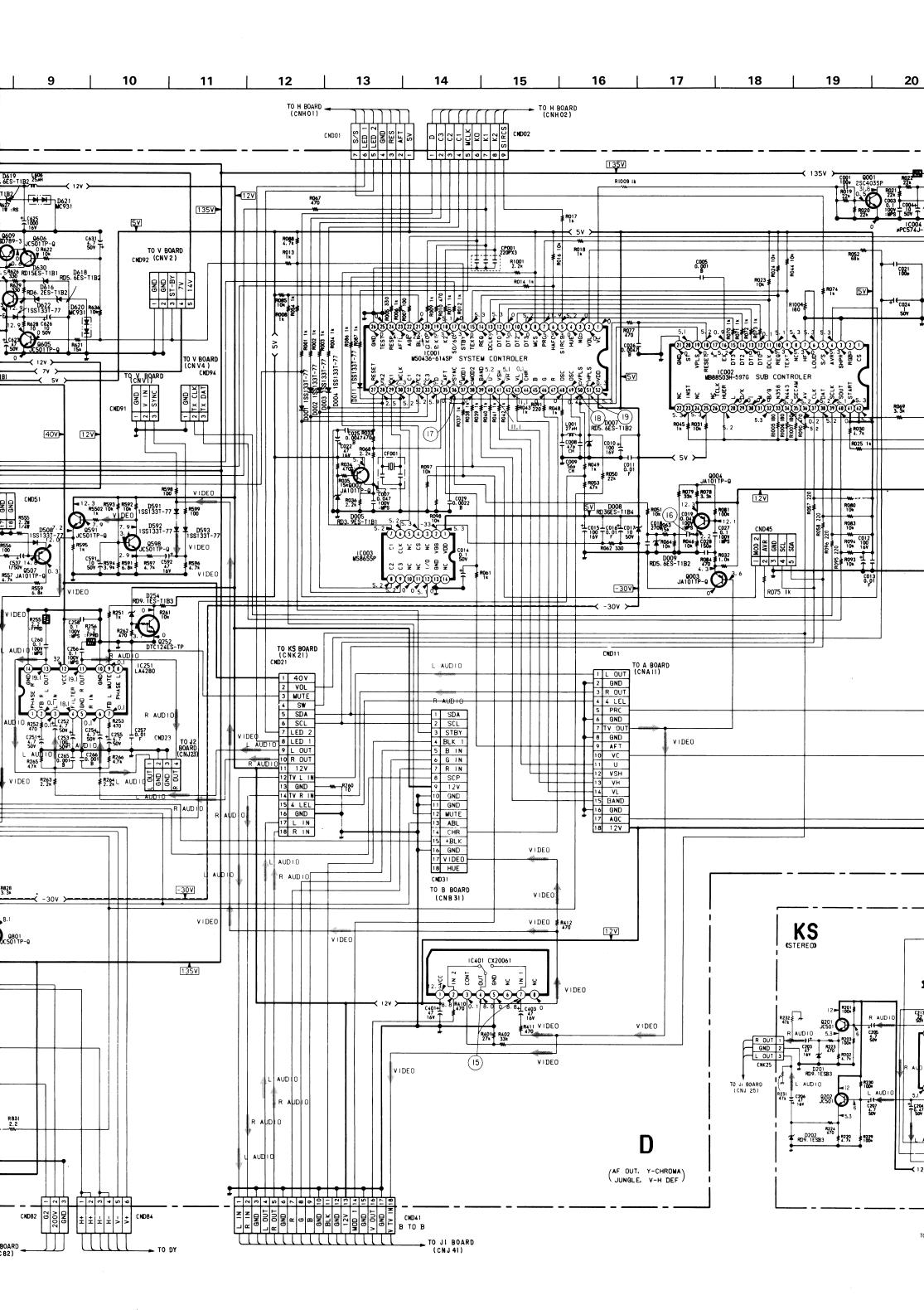


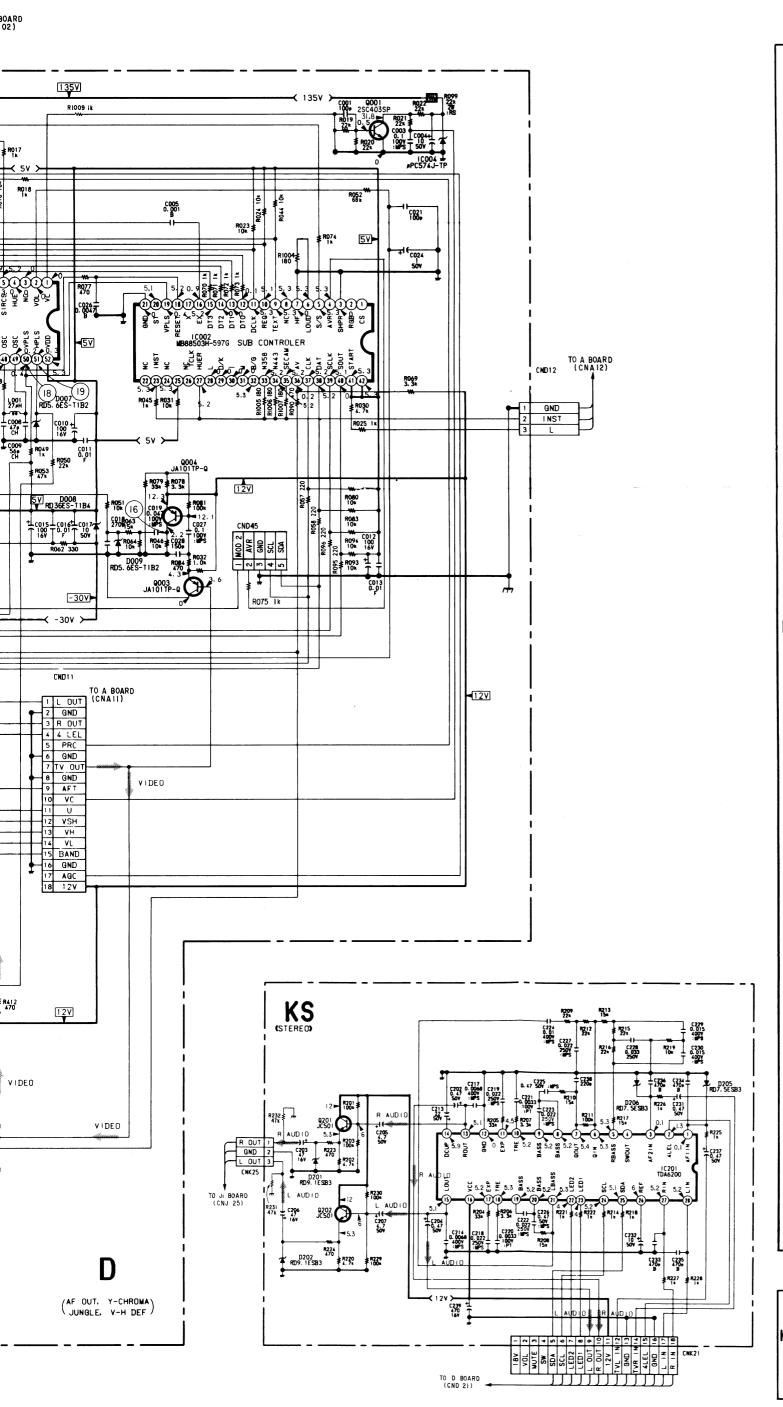
SSOR

RAM









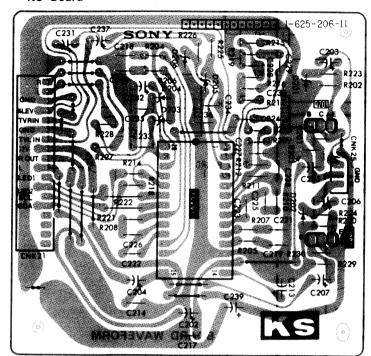
ŀ	001 002	M50436-614SP MB88503H-597G	TUNING CTL SYSTEM CTL
ŀ	003	M58655P	MEMORY
ŀ	004	<b>⊭</b> PC574J	REG
Į	251	LA4280	AF OUT
ŀ	401	CX20061 TEA2028B	VIDEO SW JUNGÉE
ŀ	501 502	TDA8170	V OUT
ı	601	TEA2164	POWER CTL
	Q 001	2SC 403	VC AMP
	002	JA101 JA101	RESET VIDEO BUFF
١	003	JA101	SYNC SEP
	252	DTC124ES	MUTE
	501	JA101	50/60 SW
1	502 503	JA101 JC501	SYNC DET
	505	2SD774-4	V CENT-1
	506	2SB734-4	V CENT-2
	507	JA101	VLK SW
ı	591 598	JC501	SYNC SW SYNC AMP
	601	JC501 2SB1185	ST BY SW-1
	602	2SD1548	REG OUT
	603	2SB1185	ST BY SW-2
	604	2SD789-04	+5V REG
	605 606	JC501 JC501	ST BY SW-3
	607	2SD1761-E	+12V REG-1
	608	2SD1761-E	+12V REG-2
	609	2SD789-04	ST BY SW-5
	801	JC501	ABL AMP
	804 805	2SD1941-06 2SC2688-L	H DRIVE
	303	2002000 L	,
	D 001	1SS133	KEY SCAN-1
	002	188133	KEY SCAN-2
	003	1SS133 1SS133	KEY SCAN-3
	004	RD3. 9ES-B1	KEY SCAN-4 PROTECT-1
	007	RD5. 6ES-B2	PROTECT-2
	800	RD36ES-B4	39V ZENER
	009	RD5. 6ES-B2	PROTECT-3
	254	1SS133 RD9. 1ES-B3	KEY SCAN-5 10V ZENER
D	501	1SS133	SOFT START
	504	GP08DPKG23	PONP UP
	506	MC931	PROTECT-4
	508 509	1SS133 1SS133	BLK SW
	511	GP08DPKG23	PROTECT-11
	512	GP08DPKG23	PROTECT-12
	513	RD4. 7ES-B2	PROTECT-10
	591 592	1SS133 1SS133	SYNC SW-1
	593	188133	SYNC SW-3
	601	KBU4JL-6088	AC RECT
	602	RGP10GPKG23	PROTECT-5
	603	GP08DPKG23 GP08DPKG23	REG DRIVE-1 REG DRIVE-2
	605	GP08DPKG23	REG DRIVE-3
	606	RGP10GPKG23	REF RECT-1
	607	RGP10GPKG23	REF RECT-2
	608	ERC25-06S CTU-12S	PULSE CLIPPER +14V RECT
	611	ERD28-06S	+135V RECT
	612	CTU-12S	+7V RECT
	613	RGP1QGPKG23	AF RECT
	614	RGP10GPKG23 RD5.6ES-B1	AF RECT REG-4
	616	RD6. 2ES-B2	REG-1
	617	RD6. 2ES-B2	REG-2
	618	RD5. 6ES-B2	REG-3
	619 620	RD5.6ES-B2 MC931	REG-3 PROTECT-6
	621	MC931	THOTECT O
	622	188133	PROTECT-8
	623	155133	STBY SW-1
	624	1SS133 1SS133	STBY SW-2 PROTECT-9
	630	RD15ES-B1	REG
		RD10ES-B1	PROTECT
į	632		
	633	1SS133	PROTECT
	633 801	RGP10GPKG23	27V RECT
	633		
	633 801 802	RGP10GPKG23 RGP10GPKG23	27V RECT
	801 802 803 804 805	RGP10GPKG23 RGP10GPKG23 RGP01-17PKG23 GP08DPKG23 GP08DPKG23	27V RECT 200V RECT H CENT-1 H CENT-2
	801 802 803 804 805 806	RGP10GPKG23 RGP10GPKG23 RGP01-17PKG23 GP08DPKG23 GP08DPKG23 ERC06-15S	27V RECT 200V RECT  H CENT-1 H CENT-2 H DANPER-1
	801 802 803 804 805 806 807	RGP10GPKG23 RGP10GPKG23 RGP01-17PKG23 GP08DPKG23 GP08DPKG23 ERC06-15S ERC06-15S	27V RECT 200V RECT  H CENT-1 H CENT-2 H DANPER-1 H DANPER-2
	801 802 803 804 805 806	RGP10GPKG23 RGP10GPKG23 RGP01-17PKG23 GP08DPKG23 GP08DPKG23 ERC06-15S	27V RECT 200V RECT  H CENT-1 H CENT-2 H DANPER-1
	633 801 802 803 804 805 806 807	RGP10GPKG23 RGP10GPKG23 RGP01-17PKG23 GP08DPKG23 GP08DPKG23 ERC06-15S ERC06-15S ERC29-08J	27V RECT 200V RECT  H CENT-1 H CENT-2 H DANPER-1 H DANPER-2 PIN DANPER
	633 801 802 803 804 805 806 807	RGP10GPKG23 RGP10GPKG23 RGP01-17PKG23 GP08DPKG23 GP08DPKG23 ERC06-15S ERC06-15S ERC29-08J	27V RECT 200V RECT  H CENT-1 H CENT-2 H DANPER-1 H DANPER-2 PIN DANPER

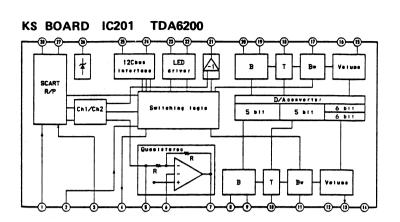
	IC 201	TDA6200	AF INTERFACE
	Q 201	JC501	AF OUT
KS	202	JC501	AF OUT
	D 201	RD9.1ESB3	PROTECT
	202	RD9.1ESB3	PROTECT
	205	RD7. 5ESB3	PROTECT
	206	RD7.5ESB3	PROTEKT



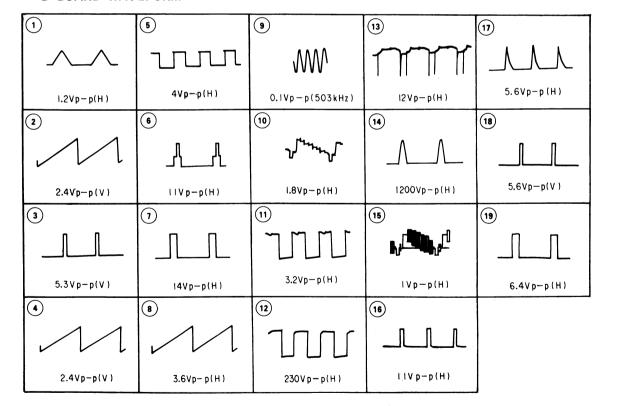
### PRINTED WIRING BOARDS (2)

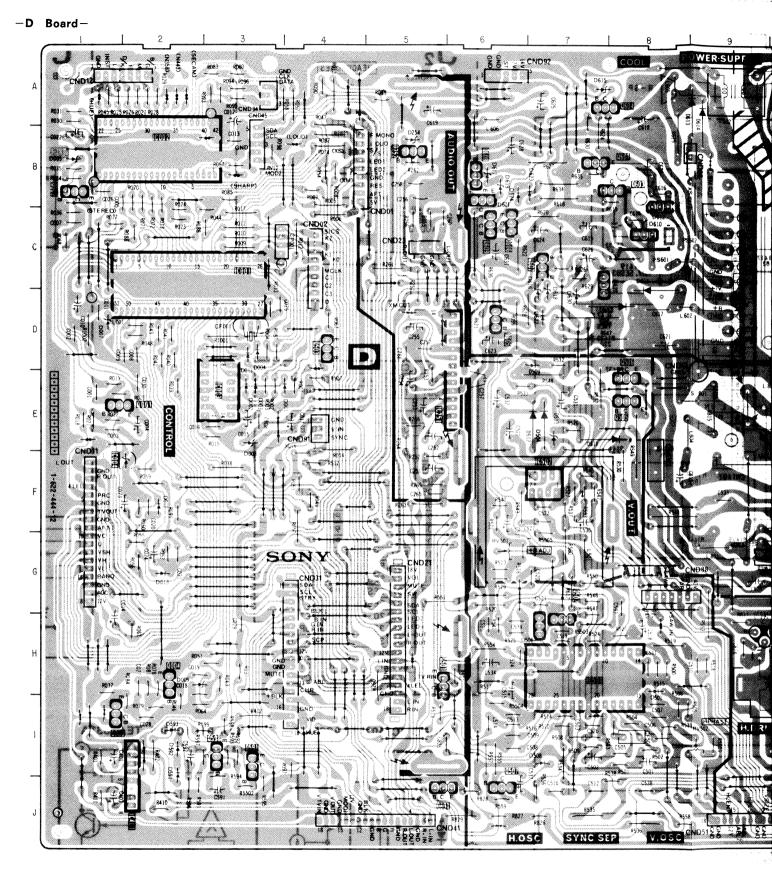
### -KS Board-





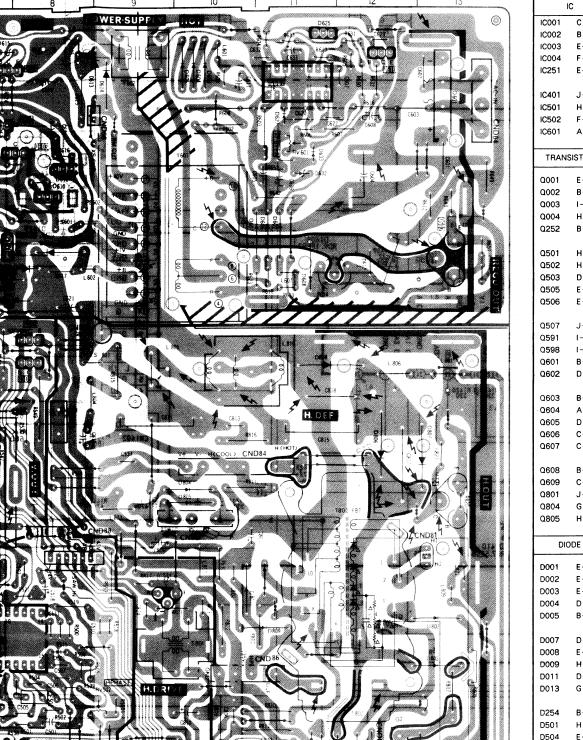
### • D BOARD WAVEFORM

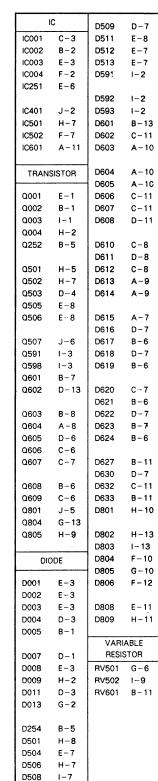




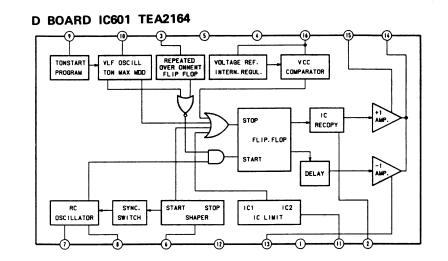
KV-X25TD RM-673 KV-X25TD

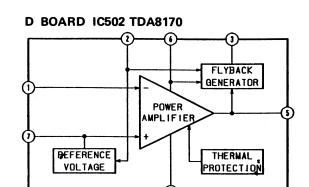


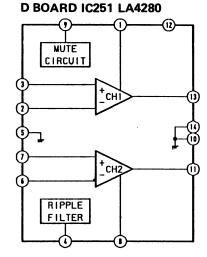




# D BOARD IC501 TEA2028A | HORIZ. | SYNCHRO | VIDEO | INHIBITION + TIME C SWITCH IN | INDENTIFICATION LOGIC | INDENTIFICATION LOGIC TIMING | INDENTIFICATION LOGIC | INDENTIFIC



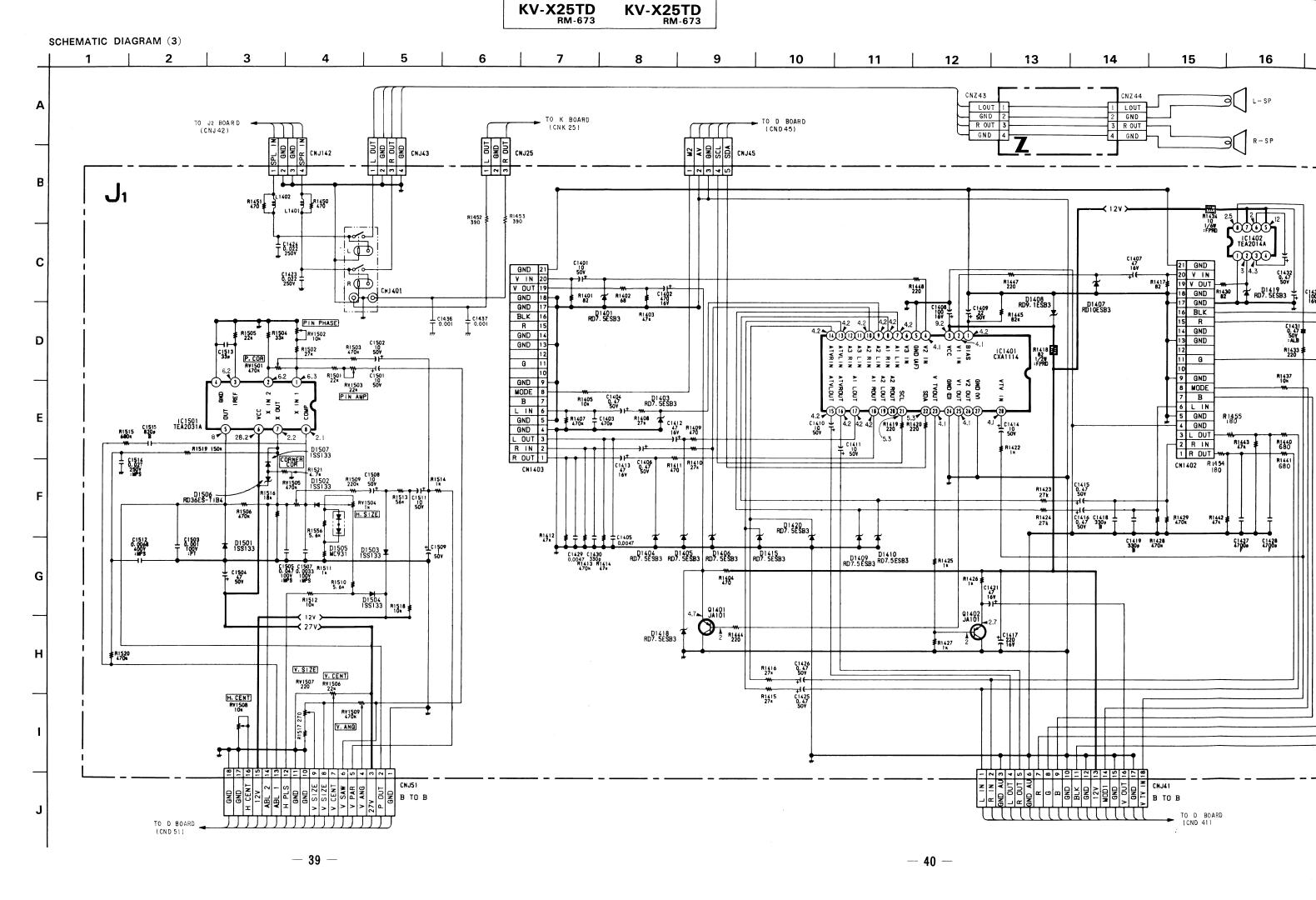




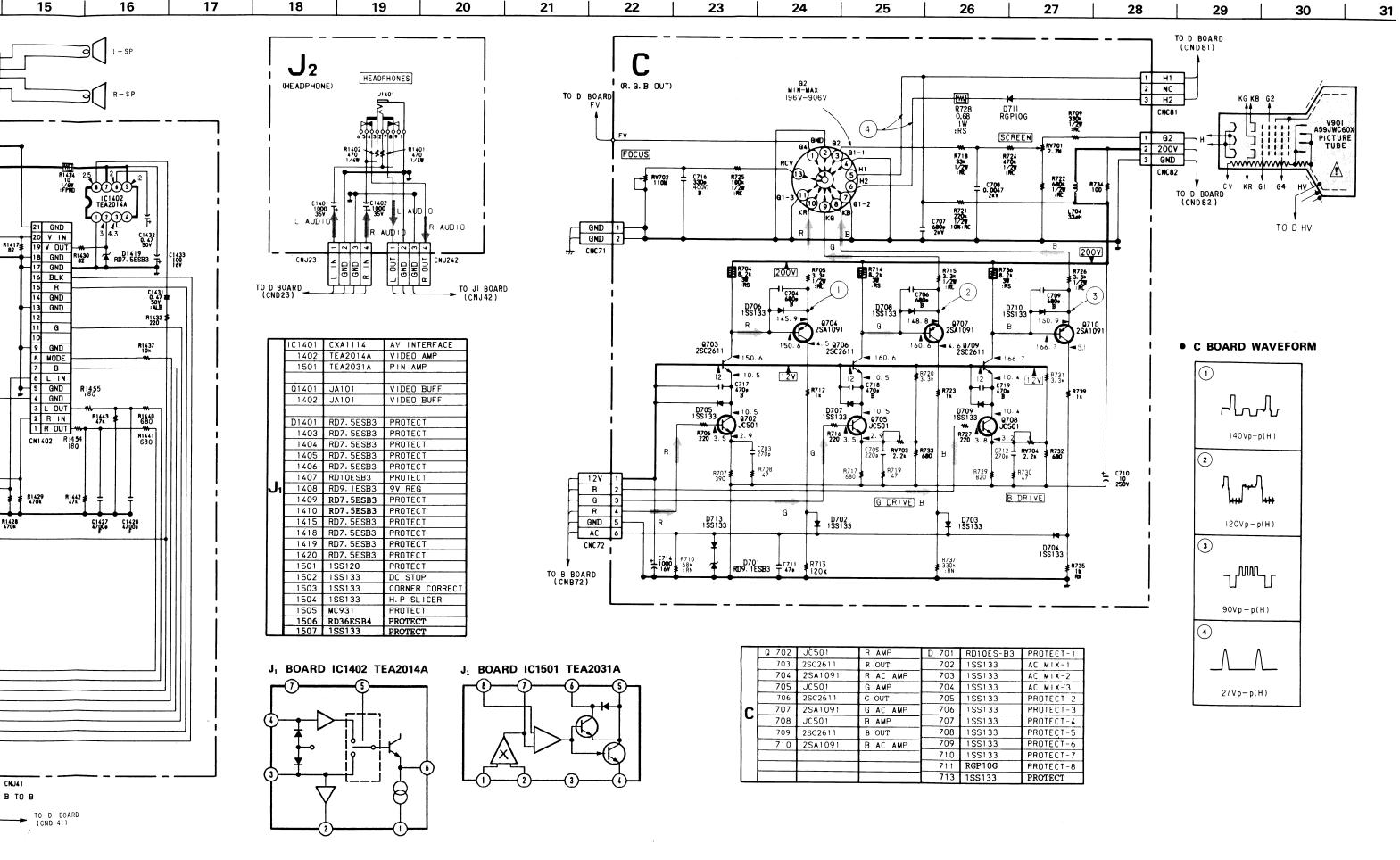


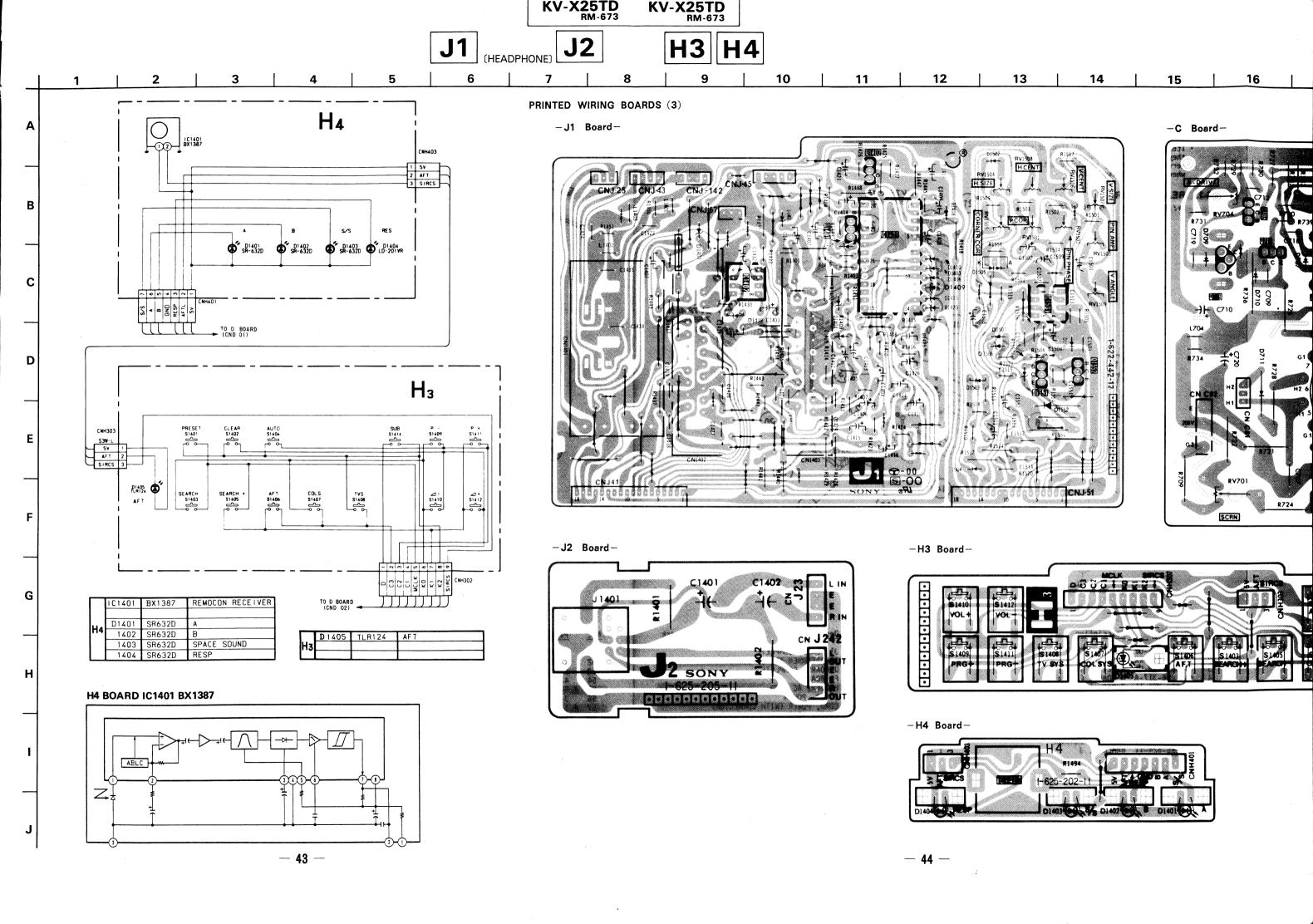
### NOTE

The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.



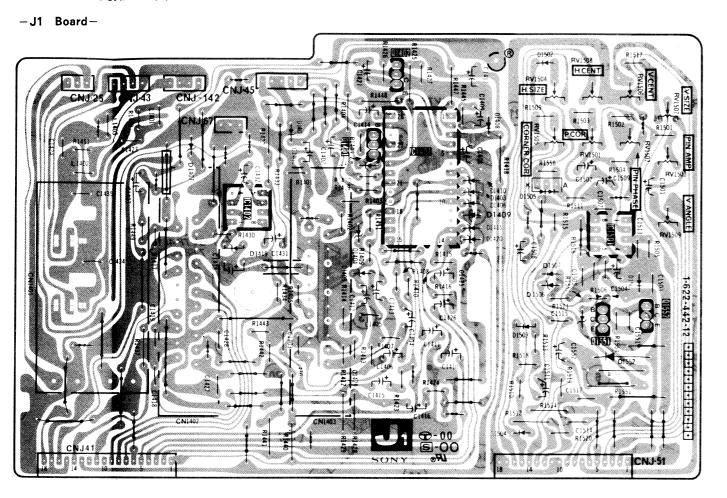
KV-X25TD RM-673 KV-X25TD RM-673

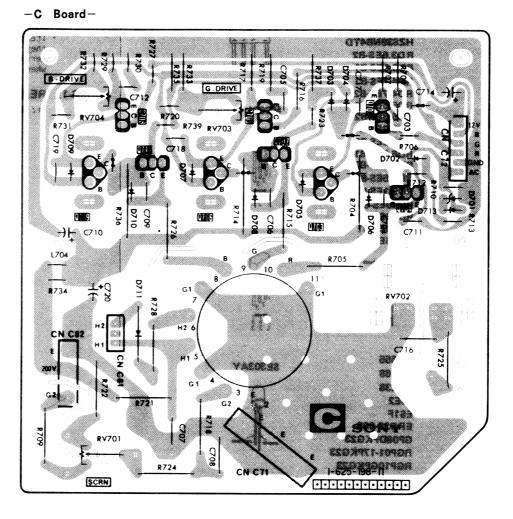




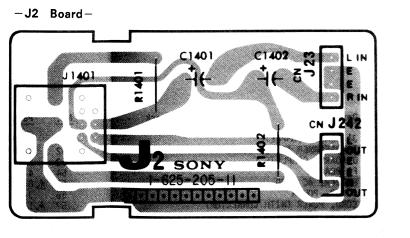


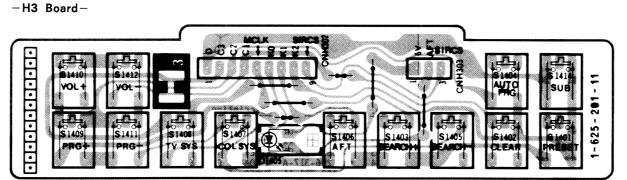
RINTED WIRING BOARDS (3)

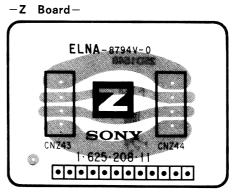


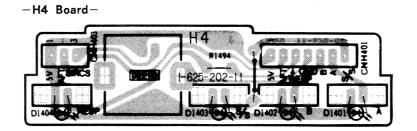


18 | 19









Part N

4-387-

4-387-

X-4385

4-386-

\*A-1330

\*4-379-

4-303-

4-373-\*4-387-

55 **A** 8-733-56 3-703-

57 A.1-451-58 \*4-379-

# **SECTION 6 EXPLODED VIEWS**

# NOTE:

- · Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "  $\star$  " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark 🛕 are critical for safety. Replace only with part number

# 



men of deliving these i tense	
6-1. REAR COVER  •: BVTP 3x12 7-685-648-79	BVTP 4x 16 7-685-663-79
	22
	BVTP 4×16 7-685-663-79
	(23) 9 (22) BVTP 4x16
4	7-685-663-79
	(11)
5)	21
6	17 20
(15)	(19)
	16) (18)
(2)	

No.	Part No.	Description	Remark	No.	Part No.	Description Rem	<u>ark</u>
5 A 6 7 8 9 10 11		TUNER, ÉT (UV-617) BRACKET, A SUPPORTER, PC BOARD V BOARD, COMPLETE B BOARD, COMPLETE	atte on week e	16	*A-1371-373-A	J1 BOARD, COMPLETE TRANSFORMER ASSY, FLYBACK D BOARD, COMPLETE F1 BOARD HOLDER, AC CORD COVER, POWER CORD, POWER (WITH CONNECTOR) COVER, REAR BOARD ASSY, BAFFLE SPEAKER Z BOARD	

### 5-5, SEMICONDUCTORS



CX20061



LA4280



M50436-614SP



M58655P



CXA1114 MAB8461P-W136 TDA4555 TDA4580 TDA6200 TDA6600

TEA2028B SAA5231 μPD4364CX015L



MB88503H-597G



SAA5243E

(Top view) TDA2556



# TDA2595

<u>Nonannanô</u> <del>o a a a a a a a a</del> (Top view)

TDA3541 TDA8442 TEA2164



TDA8170



**TEA2014A** TEA2031A

| 2 3 4 | Top view)

μPC574J



2SA933 2SA1091 JA101TP JC501TP

DTA114ES

DTA124ES

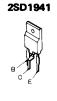
DTA144ES

DTC114ES

DTC124ES DTC144ES







-46 -



2SB734

2SD774

2SB740

2SC1475

2SC2060

2SD789

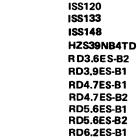
2SB1185

2SD1761

2SC2611

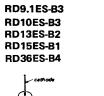
2SC2688

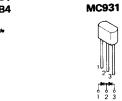
2SD1548



**ISS119** 







KBU-4JL

MC921

SE303AY

SR632D

**TLR124** 

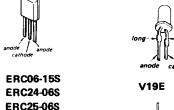
0





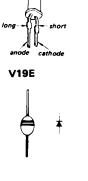












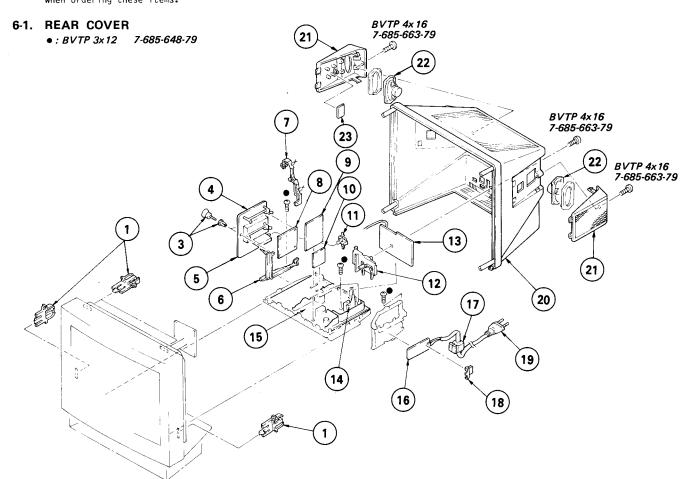
## **SECTION 6 EXPLODED VIEWS**

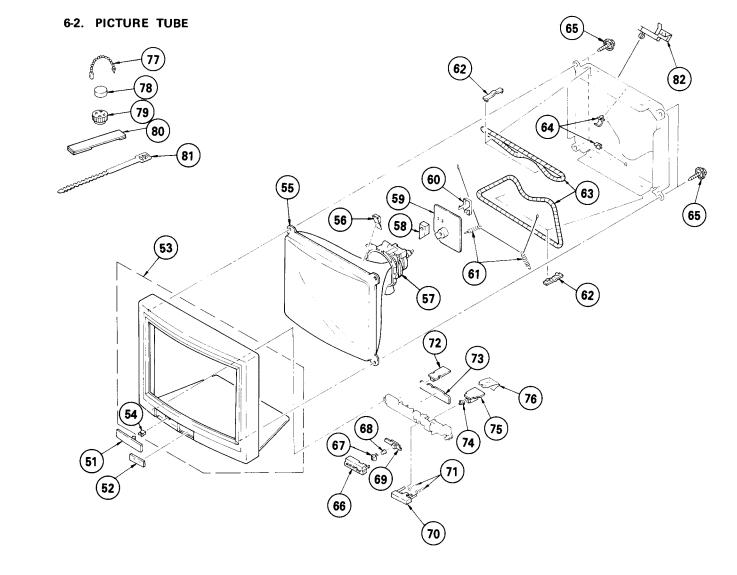
#### NOTE:

- NOTE:
   Items with no part number and no description are not stocked because they are seldom required for routine service.
   The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " \* are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark  $\, \hat{\mathbb{A}} \,$  are critical for safety.

Replace only with part number specified.





No.	Part No.	<u>Description</u> Re	emark	No.	Part No.	Description	Remark
1 2 3 4 5 6 7 8 9 10 11	<b>A.1-463-881-11</b> *4-386-629-11 *4-386-628-11 *A-1347-014-A	FOOT, F RIVET, T TYPE A BOARD, COMPLETE TUNER, ET (UV+617) BRACKET, A	The late of the la	16 16 17 18	*A-1371-373-A \$.1-439-416-11: *A-1345-720-A *1-625-199-11 \$.4-022-115-01: *4-386-620-01 \$.1-559-346-11: 4-387-818-01: X-4385-930-1: 1-503-642-21: *1-625-208-11	TRANSFORMER ASSY, FLYBACK	

(2)

No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
51	4-387-814-21	DOOR		67	*4-381-686-01	BRACKET (B), BAR, OPTICAL	
52	4-387-826-01	WINDOW, ORNAMENTAL		i 68	*4-374-987-01		
53	X-4385-931-1	BEZEL & CABINET ASSY	54	69	*1-625-202-11		
54	4-386-710-01	CATCHER, PUSH		70	4-387-812-01	BUTTON, POWER	
55	A.8-733-224-05	PICTURE TUBE (A59JWC60X)		71	4-387-809-01	SPRING	
56	3-703-961-01	SPACER, DY		72	*1-625-205-11	J2 BOARD	
- 57	A.1-451-311-21	DEFLECTION YOKE (SY-153E)	complete indicate a complete only	73	*1-625-201-11	H3 BOARD	
58	*4-379-167-01	COVER (MAIN), CV		74		SWITCH, PUSH (AC POWER) (1 KEY)	5-11
59	*A-1330-849-A	C BOARD, COMPLETE		75	*1-625-200-11		
<b>6</b> 0	<b>*4-379-160-01</b>	COVER (REAR LID), CV		76	*4-387-804-01	INSULATOR	
61	4-303-774-XX	SPRING		77	4-308-870-00	CLIP, LEAD WIRE	
62	*4-385-916-01	HOLDER (D)		78	1-452-032-00		
63	⚠.1-426-325-11			79	1-452-094-00		
64	*4-371-629-01			80	X-4387-214-1		
65	4-373-263-01	SCREW (M), PT		81	3-701-007-00	BAND, BINDING	
66	*4-387-813-01	COVER, H2		82	*4-387-216-01	HOLDÉR, LEAD	

The components identified by shading and mark  $\, \Lambda \,$  are criti-

Replace only with part number

cal for safety.

specified.

# SECTION 7 ELECTRICAL PARTS LIST

В

#### NOTE:

specified.

The components identified by shading and mark A are critical for safety.

Replace only with part number

- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

All resistors are in ohms
F: nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS

COILS

• MF : μF, PF : μμF

• MMH : inH, UH : μH

Note: In this parts list, the mounting diagram is for a different product.

Therefore, an excess of parts is listed.

Ref.No.	. Part No.	Description			Remark	Ref.No.	Part No.	Description			Remark
	*A-1135-455-A	B BOARD, COM				C367   C368   C381   C382   C384	1-101-004-00 1-101-880-00 1-124-902-00 1-124-927-11 1-124-477-11	CERAMIC CERAMIC ELECT ELECT ELECT	0.01MF 47PF 0.47MF 4.7MF 47MF	5% 20% 20% 20%	50V 50V 50V 50V 16V
C301 C302 C303 C304 C305	1-110-179-81 1-110-179-81 1-126-101-11 1-110-179-81 1-124-119-00	MYLAR MYLAR ELECT MYLAR ELECT	0.22MF 0.22MF 100MF 0.22MF 330MF	10% 10% 20% 10% 20%	100V 100V 16V 100V 16V	   C385   C387	1-124-927-11 1-124-902-00 1-101-884-00	ELECT ELECT	4.7MF 0.47MF 56PF	20% 20% 5%	50V 50V 50V
C306 C307 C308 C309 C310	1-124-902-00 1-124-902-00 1-124-902-00 1-124-902-00 1-110-175-81	ELECT ELECT ELECT ELECT MYLAR	0.47MF 0.47MF 0.47MF 0.47MF 0.1MF	20% 20% 20% 20% 10%	50V 50V 50V 50V 100V	CNB72	*1-562-370-21 *1-564-895-11 *1-560-278-00		TOR 6P	ARD 18P	
C311 C312 C313 C314 C315	1-110-175-81 1-124-902-00 1-124-902-00 1-124-902-00 1-124-499-11	MYLAR ELECT ELECT ELECT ELECT	0.1MF 0.47MF 0.47MF 0.47MF 1MF	10% 20% 20% 20% 20%	100V 50V 50V 50V 50V	CT332	<u>TRI</u> 1-141-181-11	MMER CAP, TRIMMER			
C319 C321 C322 C325 C326	1-124-477-11 1-102-980-00 1-101-888-00 1-124-477-11 1-101-004-00	ELECT CERAMIC CERAMIC ELECT CERAMIC	47MF 270PF 68PF 47MF 0.01MF	20% 5% 5% 20%	16V 50V 50V 16V 50V	   D301   D302   D303   D304	8-719-911-19 8-719-911-19 8-719-911-19 8-719-911-19	DIODE 188119			
C327 C331 C332 C333 C334	1-101-004-00 1-124-963-11 1-124-119-00 1-101-005-00 1-101-884-00	CERAMIC ELECT ELECT CERAMIC CERAMIC	0.01MF 33MF 330MF 0.022MF 56PF	20% 20% 5%	50V 16V 16V 50V 50V	D305     D307   D309	8-719-911-19 8-719-110-23	DIODE 1SS119 DIODE RD11ES DIODE 1SS119			
C335 C336 C337 C338 C339	1-101-006-00 1-110-190-81 1-101-004-00 1-101-888-00 1-102-735-00	CERAMIC MYLAR CERAMIC CERAMIC CERAMIC	0.047MF 0.01MF 0.01MF 68PF 120PF	10% 5% 5%	50V 400V 50V 50V 50V	     DL331 	1-415-187-13	AY LINE DELAY LINE			
C340 C341 C342 C343 C344	1-102-953-00 1-102-978-00 1-102-953-00 1-102-735-00 1-101-888-00	CERAMIC CERAMIC CERAMIC CERAMIC CERAMIC	18PF 220PF 18PF 120PF 68PF	5% 5% 5% 5% 5%	50V 50V 50V 50V 50V	IC302	8-759-923-81 8-759-941-98 8-759-947-20	IC TDA4580 IC TDA8442 IC TDA4555-V	8		
C345 C346 C347 C349 C350	1-102-978-00 1-102-074-00 1-124-499-11 1-136-173-00 1-110-171-81	CERAMIC ELECT FILM	220PF 0.001MF 1MF 0.47MF 0.047MF	5% 10% 20% 5% 10%	50V 50V 50V 50V 100V	 	1-410-868-21 1-410-868-21 1-410-469-21 1-410-470-11	 INDUCTOR INDUCTOR	4.7UH 4.7UH 8.2UH 10UH		
C352 C353 C354 C355 C360	1-110-182-81 1-102-506-00 1-102-074-00 1-102-679-00 1-101-004-00	CERAMIC	0.022MF 7PF 0.001MF 120PF 0.01MF	10% 0.5PF 10% 5%	250V 50V 50V 50V 50V	L331   L332   L333   L334   L335	1-410-469-21 1-404-539-11 1-404-554-11 1-404-554-11 1-404-554-11	INDUCTOR  COIL COIL COIL COIL	8.2UH		
C361 C364 C365 C366	1-101-004-00 1-101-361-00 1-124-477-11 1-124-477-11	CERAMIC CERAMIC ELECT ELECT	0.01MF 150PF 47MF 47MF	5% 20% 20%	50V 50V 16V 16V	L339	1-410-868-21	INDUCTOR	4.7UH		



The components identified by shading and mark  $\triangle$  are critical for safety.

Replace only with part number specified.

	J	J											
Ref.No. Par	t No.	Description				Remark	Ref.No.	Part No.	Description				Remark
Q303 8-7 Q304 8-7 Q305 8-7	729-178-54 729-178-54 729-900-36 729-900-36	NSISTOR  TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR D TRANSISTOR D	SC2785 TC124E TC124E	S			R356 R357 R358 R361 R361	1-249-427-11 1-249-409-11 1-249-409-11 1-249-418-11 1-249-421-11	CARBON CARBON CARBON CARBON CARBON	6.8K 220 220 1.2K 2.2K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
Q312 8-7 Q313 8-7 Q316 8-7 Q334 8-7	229-178-54 229-178-54 229-178-54 229-178-54 229-178-54	TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2:	SC2785 SC2785 SC2785 SC2785				R363   R367   R368   R369   R370	1-249-418-11 1-249-409-11 1-249-417-11 1-249-417-11 1-249-418-11	CARBON CARBON CARBON CARBON CARBON	1.2K 220 1K 1K 1.2K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
Q336 8-7 Q381 8-7 Q382 8-7	29-178-54 29-178-54 29-900-36 29-178-54 29-117-54	TRANSISTOR 25 TRANSISTOR 25 TRANSISTOR 25 TRANSISTOR 25 TRANSISTOR 25	SC2785 FC124E SC2785	S				1-249-417-11 1-249-429-11 1-249-441-11 1-249-441-11 1-249-426-11	CARBON CARBON CARBON CARBON CARBON	1K 10K 100K 100K 5.6K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
	<del></del>	ISTOR					R382 R383	1-249-439-11 1-247-885-00 1-215-483-00 1-249-435-11	CARBON CARBON CARBON CARBON	68K 180K 390K 33K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
R302 1-2 R303 1-2 R304 1-2	49-409-11 49-409-11 49-409-11 49-409-11 49-421-11	CARBON CARBON CARBON CARBON CARBON	220 220 220 220 2.2K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	İ	R389 R391 R392	1-247-883-00 1-249-404-00 1-249-402-11	CARBON CARBON CARBON	150K 82 56	5% 5% 5%	1/4W 1/4W 1/4W	
R307 1-2 R308 1-2	49-441-11 49-414-11 49-405-11	CARBON CARBON CARBON	100K 560 100	5% 5% 5%	1/4W 1/4W 1/4W	! ! !	R394 R398	1-249-402-11 1-249-402-11 1-249-433-11 1-249-419-11	CARBON CARBON CARBON	56 56 22K	5% 5% 5%	1/4W 1/4W 1/4W	
R310 1-20 R311 1-20	49-405-11 49-405-11	CARBON CARBON	100 100	5% 5%	1/4W 1/4W		K1324		CARBON  ABLE RESISTOR		5%	1/4W	
R313 1-24 R314 1-24 R315 1-24	49-409-11 49-441-11 49-413-11 49-407-11 49-407-11	CARBON CARBON CARBON CARBON	220 100K 470 150	5% 5% 5%	1/4W 1/4W 1/4W 1/4W	     	RV331	1-230-504-11	RES, ADJ, CAR		ı		
R317 1-24 R318 1-24 R319 1-24 R320 1-24	49-407-11 49-429-11 49-409-11 49-417-11	CARBON CARBON CARBON CARBON CARBON	150 150 10K 220 1K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	     	T331	TRAM 1-404-584-11 CRYS					
R322 1-24	49-421-11 49-420-11 49-421-11	CARBON CARBON CARBON	2.2K 1.8K 2.2K	5% 5% 5%	1/4W 1/4W 1/4W	! !	X332	1-567-131-00		RYSTAL			
R325 1-24	49-426-11 49-429-11 49-419-11	CARBON CARBON CARBON	5.6K 10K 1.5K	5% 5%	1/4W 1/4W 1/4W	!	YCM301	<u>YC M</u> 1-235-753-21	ODULE YC MODULE				
R328 1-24 R329 1-24 R330 1-24	49-427-11 49-397-11 49-397-11 49-397-11 49-418-11	CARBON CARBON CARBON CARBON CARBON	6.8K 22 22 22 21.2K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	 		-625-208-11		*****	****	******	****
R333 1-24 R334 1-24 R335 1-24	19-412-11 19-408-11 19-415-11	CARBON CARBON CARBON CARBON CARBON	47 390 180 680 1.2K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		CNZ44 *1	-564-881-11 -564-881-11	PLUG, CONNECTO	R 4P			
R338 1-24 R344 1-24 R346 1-24	19-429-11 19-437-11 19-419-11	CARBON CARBON CARBON CARBON CARBON	5.1K 10K 47K 1.5K 10K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	<del> </del>		-625-200-11 ,		*****	****	*****	****
R349 1-24 R350 1-24 R351 1-24	9-415-11 9-415-11 9-409-11	CARBON CARBON CARBON CARBON CARBON CARBON	47K 680 680 220 330K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		CNF262*1	<u>CONNE</u> -566-664-11 F SWITC	PIN, CONNECTOR	<b>4</b> P			
R353 1-24	7-891-00	CARBON	330K		1/4W		\$1701 <u>A</u> .1	-571-410-11 S		AC POWE	R)(1:+	(EY)	r Will

The components identified by shading and mark A are critical for safety.
Replace only with part number specified.



										ئا لئ
Ref.No. Part No.	Description			Remark	Ref.No.	Part No.	Description			Remark
*1-625-199-11 CAP	F1 BOARD *******				C111 C112 C113 C114 C117	1-101-003-00 1-101-003-00 1-101-003-00 1-124-963-11 1-102-978-00	CERAMIC CERAMIC CERAMIC ELECT CERAMIC	0.0047MF 0.0047MF 0.0047MF 33MF 220PF	20 <b>%</b> 5 <b>%</b>	50V 50V 50V 16V 50V
C1601A.1-136-518-11 C1602A.1-136-519-11 C1603A.1-162-578-51 C1604A.1-162-578-51 C1605A.1-162-578-51	FILM CERAMIC	0.33MF 0.47MF 0.0047MF 0.0047MF 0.0047MF	20% 20% 20% 20% 20%	300V 300V 400V 400V 400V	C118 C119 C120 C121 C121	1-101-880-00 1-126-101-11 1-124-925-11 1-101-003-00 1-101-003-00	CERAMIC ELECT ELECT CERAMIC CERAMIC	47PF 100MF 2.2MF 0.0047MF 0.0047MF	5% 20% 20%	50V 16V 50V 50V 50V
C1606A_1-162-578-51	GERAMIC .	0.0047MF	20%	400V	   C123   C124   C125	1-101-003-00 1-101-888-00 1-101-888-00	CERAMIC CERAMIC CERAMIC	0.0047MF 68PF 68PF	5% 5%	50V 50V 50V
CON	NECTOR				C127   C128	1-101-003-00 1-124-963-11	CERAMIC ELECT	0.0047MF 33MF	20%	50V 16V
CNF61 *1-566-664-11 CNF64 *1-506-349-21 CNF65 *1-508-765-00 CNF66 *1-508-786-00 CNF67 *1-560-290-00	PIN, CONNECTOR 3P PLUG (L) 3P PLUG (M) 2P PLUG (M) PLUG, CONNECTOR		·ITCH)		C129   C130   C131   C132   C133	1-101-888-00 1-101-004-00 1-101-006-00 1-124-499-11 1-101-003-00	CERAMIC CERAMIC CERAMIC ELECT CERAMIC	68PF 0.01MF 0.047MF 1MF 0.0047MF	5% 20%	50V 50V 50V 50V 50V
CNF162*1-506-347-21	4P PLUG				C134	1-124-499-11	ELECT	1MF	20%	50V
FUS F1601 <u>↑</u> 1-532-350-11	<del></del>	0G 46/250V	in water	se se A	C135 C136 C137 C138	1-101-004-00 1-101-006-00 1-102-961-00 1-124-499-11	CERAMIC CERAMIC CERAMIC ELECT	0.01MF 0.047MF 27PF 1MF	5% 20%	50V 50V 50V 50V
1-533-149-00	HOLDER, FUSE	; F1601			C139 C140	1-123-875-11 1-108-614-91	ELECT MYLAR	10MF 0.001MF	20% 10%	50V 100V
FIL LF1601A.1-421-866-12 LF1602A.1-421-776-11	LET:	射機性の college Tollege		- 19-1251 P	C141   C142   C143 	1-129-794-00 1-102-816-00 1-101-361-00	FILM CERAMIC CERAMIC	0.0033MF 120PF 150PF	2% 5% 5%	100V 50V 50V
RES	ISTOR				C144 C145 C146 C147	1-124-477-11 1-124-477-11 1-124-477-11 1-124-477-11	ELECT ELECT ELECT ELECT	47MF 47MF 47MF 47MF	20% 20% 20% 20%	16V 16V 16V 16V
R1601 <u>A</u> 1-247-879-91 R1602 <u>A</u> 1-244-945-91 R1603 <u>A</u> 1-217-328-11 R1604 <u>A</u> 1-247-879-91 R1605 <u>A</u> 1-247-289-11	CARBON WIREWOUND CARBON	100K 5% 1M 5% 2.7 10% 100K 5% 8.2M 5%	1/4W 1/2W 7W 1/4W	F (1868)	C148     C149   C150   C151	1-123-875-11 1-136-153-00 1-136-153-00 1-124-908-11	ELECT FILM	10MF 0.01MF 0.01MF 22MF	20% 5% 5% 20%	50V 50V 50V 50V
R1606/1_217_777-11	WIREWOUND	100 10%	10W	e the	C152	1-124-908-11 1-136-165-00	ELECT FILM	22MF 0.1MF	20% 5%	50V 50V
-	RMISTOR				   C154   C155   C156	1-136-169-00 1-124-963-11 1-136-157-00	FILM ELECT FILM	0.22MF 33MF 0.022MF	5% 20% 5%	50V 16V 50V
THP601A_1-806-387-11					C157 C158	1-136-161-00 1-124-963-11	FILM ELECT	0.047MF 33MF	5% 20%	50V 16V
********			*****	*****	C159	1-124-477-11	ELECT	47MF	20%	16V
*A-1296-317-A *4-380-698-01 *4-380-699-01	CASE (MAIN),	***** SHIELD, Al	۸1		C161 C162 C163 C164	1-124-477-11 1-102-816-00 1-124-927-11 1-110-190-81	ELECT CERAMIC ELECT MYLAR	47MF 120PF 4.7MF 0.01MF	20% 5% 20% 10%	16V 50V 50V 400V
*4-382-701-01	CASE (BOTTOM				C165 C167 C168 C169	1-130-853-00 1-124-499-11 1-110-179-81 1-123-875-11	FILM ELECT MYLAR ELECT	0.0047MF 1MF 0.22MF 10MF	5% 20% 10% 20%	50V 50V 100V 50V
C101 1-124-908-11	ELECT	22MF	20%	50V	C170	1-101-004-00	CERAMIC	0.01MF		50 <b>v</b>
C102 1-126-103-11 C103 1-110-175-81 C104 1-110-173-81 C105 1-110-173-81	ELECT MYLAR MYLAR MYLAR	470MF 0.1MF 0.068MF 0.068MF	20% 10% 10% 10%	16V 100V 100V 100V	C171   C174   C177   C187   C188	1-101-004-00 1-124-499-11 1-102-119-00 1-101-003-00 1-124-963-11	CERAMIC ELECT CERAMIC CERAMIC ELECT	0.01MF 1MF 0.0015MF 0.0047MF 33MF	20% 10% 20%	50V 50V 50V 50V 16V
C106 1-101-004-00 C107 1-102-963-00 C108 1-124-963-11 C109 1-101-003-00 C110 1-124-499-11	CERAMIC CERAMIC ELECT CERAMIC ELECT	0.01MF 33PF 33MF 0.0047MF 1MF	5% 20% 20%	50V 50V 16V 50V 50V	   C189   C190	1-124-963-11 1-110-175-81	ELECT MYLAR	33MF 0.1MF	20% 10%	16 <b>V</b> 100 <b>V</b>
= 201-133-11			- V /0		'					



Ref.No. Part No.	Description	Remark	Ref.No.	. Part No.	Description				Remark
CD101 1-404-750-1 CD102 1-404-745-1 CD103 1-404-746-1 CF101 1-404-134-0	DISCRIMINATOR, CERAMIC DISCRIMINATOR, CERAMIC TRAP, CERAMIC (5.5MHZ)		R105 R106 R107 R108 R109	1-249-418-11 1-247-891-00 1-249-421-11 1-249-421-11 1-249-423-11	CARBON CARBON CARBON CARBON CARBON	1.2K 330K 2.2K 2.2K 3.3K	5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
CF103 1-527-840-0 CF104 1-527-839-0 CF105 1-527-839-0 SWF101 1-404-717-1	) FILTER, CERAMIC		R110   R111   R112   R113   R114	1-249-412-11 1-249-418-11 1-249-421-11 1-249-411-11 1-249-413-11	CARBON CARBON CARBON CARBON CARBON	390 1.2K 2.2K 330 470	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
<u>c</u>	DNNECTOR		R115 R116	1-249-413-11 1-249-419-11	CARBON CARBON	470 1.5K	5% 5%	1/4W 1/4W	
CNA11 *1-566-659-1	CONNECTOR, HINGE (SOCKET) 18P		R117   R118   R119	1-249-431-11 1-249-425-11 1-249-417-11	CARBON CARBON CARBON	15K 4.7K 1K	5% 5% 5%	1/4W 1/4W 1/4W	
D105 8-719-109-99 D106 8-719-911-19	TODE  2 DIODE RD6.2ES-B1  5 DIODE 1SS119  5 DIODE MC921		R121   R122   R123   R124   R125	1-249-429-11 1-249-436-11 1-249-417-11 1-249-423-11 1-249-429-11	CARBON CARBON CARBON CARBON CARBON	10K 39K 1K 3.3K 10K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
<u>I</u> IC101 8-759-909-08 IC102 8-759-941-98	B IC TDA3541 B IC TDA2556		R126   R127   R128   R129   R130	1-249-436-11 1-249-432-11 1-249-432-11 1-249-429-11 1-249-429-11	CARBON CARBON CARBON CARBON CARBON	39K 18K 18K 10K 10K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
IC103 8-759-013-1: IC104 8-759-946-9: IC105 8-759-003-9(	IC TDA2595~V7 IC TBA129		   R132   R133   R134   R135	1-249-414-11 1-249-425-11 1-249-414-11 1-249-419-11	CARBON CARBON CARBON CARBON	560 4.7K 560 1.5K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
	DIL		R136 	1-249-414-11	CARBON	560	5%	1/4W	
L101 1-408-226-00 L102 1-410-116-11 L103 1-410-467-21 L104 1-408-411-00 L105 1-410-482-31	INDUCTOR 560UH INDUCTOR 5.6UH INDUCTOR 15UH		R137   R138   R140   R141   R142	1-249-414-11 1-249-419-11 1-249-441-11 1-249-425-11 1-249-441-11	CARBON CARBON CARBON CARBON CARBON	560 1.5K 100K 4.7K 100K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
L106 1-410-476-11 L107 1-410-467-21 L108 1-410-473-11 L109 1-410-473-11 L110 1-410-064-11	INDUCTOR 5.6UH INDUCTOR 18UH INDUCTOR 18UH		R143   R144   R146   R148   R150	1-249-441-11 1-249-422-11 1-249-424-11 1-249-413-11 1-249-423-11	CARBON CARBON CARBON CARBON CARBON	100K 2.7K 3.9K 470 3.3K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
L111 1-410-482-31 L112 1-410-471-11 L113 1-410-460-11	INDUCTOR 12UH		   R151   R152   R153   R154   R155	1-249-423-11 1-249-431-11 1-249-416-11 1-249-441-11 1-249-430-11	CARBON CARBON CARBON CARBON	3.3K 15K 820 100K		1/4W 1/4W 1/4W 1/4W	
<u>TF</u>	ANSISTOR				CARBON	12K	5%	1/4W	
Q101 8-729-900-61 Q102 8-729-900-61 Q104 8-729-900-61 Q105 8-729-178-54 Q106 8-729-178-54	TRANSISTOR DTA114ES TRANSISTOR DTA114ES TRANSISTOR 2SC2785		R156 R160 R162 R163 R165	1-247-881-00 1-249-417-11 1-249-415-11 1-249-424-11 1-249-423-11	CARBON CARBON CARBON CARBON CARBON	120K 1K 680 3.9K 3.3K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
Q107 8-729-117-54 Q108 8-729-900-65 Q109 8-729-900-89 Q110 8-729-117-54 Q111 8-729-900-89	TRANSISTOR 2SA1175 TRANSISTOR DTA144ES TRANSISTOR DTC144ES TRANSISTOR 2SA1175		R166   R172   R173   R188   R189	1-249-437-11 1-249-417-11 1-249-414-11 1-249-419-11 1-249-419-11	CARBON CARBON CARBON CARBON CARBON	47K 1K 560 1.5K 1.5K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
Q112 8-729-178-54	TRANSISTOR 2SC2785			<u>V</u> AR:	ABLE RESISTOR				
Q113 8-729-178-54	TRANSISTOR 2SC2785  SISTOR		RV 102	1-237-753-11 1-237-751-11 1-237-753-11	RES, ADJ, CARE	BON 10k			
R101 1-249-405-11	CARBON 100 5% 1/4W	İ			, -, -, m.				
R102 1 -249-423-11 R103 1 -249-433-11 R104 1 -249-429-11	CARBON 3.3K 5% 1/4W CARBON 22K 5% 1/4W CARBON 10K 5% 1/4W	ļ	T101	TRAM 1-404-493-00	ISFORMER COIL				

The components identified by shading and mark  $\triangle$  are critical for safety.

Replace only with part number specified.



Ref.No.	Part No.	Description			Remark	Ref.No.	Part No.	Description				Remark
T102 T103	1-404-493-00 1-404-493-00	COIL					TRA	NSISTOR				
1103	1-404-453-00	COIC				Q702 Q703	8-729-178-54 8-729-326-11	TRANSISTOR 2S TRANSISTOR 2S				
	TUN	ER				0704 0705	8-729-200-17 8-729-178-54	TRANSISTOR 2S TRANSISTOR 2S	A1091			
TU1012	<b>1-463-881-11</b>	TUNER, ET (U	V-617)	Aphilia Care			8-729-326-11	TRANSISTOR 2S				
*****	******	*****	*****	*****	******	Q707 Q708	8-729-200-17 8-729-178-54	TRANSISTOR 2S TRANSISTOR 2S				
	*A-1330-849-A	C BOARD, COM				0709 0710	8-729-326-11	TRANSISTOR 2S TRANSISTOR 2S	C2611			
	*4-379-160-01 *4-379-167-01 *4-386-664-01	COVER (REAR COVER (MAIN) SPRING				   		ISTOR	0 20	Εø	2iJ	E
	CAD	ACITOR				R704 R705 R706	1-216-486-00 1-202-824-00 1-249-409-11	METAL OXIDE SOLID CARBON	8.2K 3.3K 220	10% 5%	3W 1/2W 1/4W	F
C703	1-102-980-00	<del></del>	270PF	5%	50 <b>v</b>	R707 R708	1-249-412-11 1-249-401-11	CARBON CARBON	390 47	5% 5%	1/4W 1/4W	
C704 C705	1-102-116-00 1-102-978-00	CERAMIC CERAMIC	680PF 220PF	10% 5%	50V 50V	R709	1-202-844-00	SOL ID	330K	10%	1/2W	
C706 C707	1-102-116-00 1-162-116-00	CERAMIC CERAMIC	680 PF 680 PF	10% 10%	50V 2KV	R710   R712	1-215-465-00	METAL CARBON	68K 1K	1% 5%	1/6W 1/4W	
¢708	1-162-114-00	CERAMIC	0.0047MF	10/6	2KV	R713   R714	1-215-471-00 1-216-486-00	METAL METAL OXIDE	120K 8.2K		1/6W 3W	F
C709 C710	1-102-114-00 1-102-116-00 1-123-947-00	CERAMIC CERAMIC ELECT	680PF 10MF	10% 20%	50V 250V	R715	1-202-824-00	SOL ID	3.3K	10%	1/2W	•
C711 C712	1-101-880-00 1-102-980-00	CERAMIC CERAMIC	47PF 270PF	5% 5%	50V 50V	R716   R717	1-249-409-11	CARBON CARBON	220 680	5% 5%	1/4W 1/4W	
C712	1-102-980-00	ELECT	1000MF	20%	16V	R718   R719	1-202-814-11 1-249-401-11	SOL ID CARBON	33K 47	10% 5%	1/2W 1/4W	
C716 C717	1-162-583-11 1-102-114-00	CERAMIC CERAMIC	330PF 470PF	10% 10%	400V 50V	R720	1-249-423-11	CARBON	3.3K	5%	1/4W	
C718 C719	1-102-114-00	CERAMIC	470PF 470PF	10% 10%	50V 50V	R721   R722	1-202-842-11 1-202-848-00	SOL ID SOL ID	220K 680K	10%	1/2W 1/2W	
6/19	1-102-114-00	CERAMIC	47071	10%	307	R723   R724	1-249-417-11 1-202-846-00	CARBON SOL ID	1K 470K	5%	1/4W 1/2W	
	CON	NECTOR				R725	1-202-838-00	SOL ID	100K	10%	1/2W	
	*1-506-371-00 *1-564-883-11		TOP 6P			R726 R727	1-202-824-00 1-249-409-11	SOL ID CARBON	3.3K 220	10% 5%	1/2W 1/4W	
CNC81		PLUG, CONNEC		PITCH)		R728 R729	1-216-347-11	METAL OXIDE CARBON	0.68 820	5% 5%	1W 1/4W	F
CHCOZ	-1-308-703-00	SF FLOG (M)				R730	1-249-401-11	CARBON	47	5% 5%	1/4W	
	DIO	DE				R731 R732	1-249-423-11 1-249-415-11	CARBON CARBON	3.3K 680	5% 5%	1/4W 1/4W	
0701 0702	8-719-110-14 8-719-911-19	DIODE RD9.18 DIODE 1SS119				R733 R734	1-249-415-11	CARBON CARBON	680 100	5% 5%	1/4W 1/4W	
D703 D704	8-719-911-19 8-719-911-19	DIODE 1SS119	1			Ì	1-215-493-00		100 1M		1/6W	
0705	8-719-911-19					R736   R737	1-216-486-00 1-215-481-00	METAL OXIDE	8.2K 330K	5%	3W 1/6W	F
D706 D707	8-719-911-19 8-719-911-19	DIODE 1SS119 DIODE 1SS119				R739	1-249-417-11		1K	5%	1/4W	
D708 D709	8-719-911-19 8-719-911-19	DIODE 1SS119 DIODE 1SS119	t				VAD	IABLE RESISTOR	,			
D710	8-719-911-19	DIODE 155119				     pv701	1-226-114-00		•	75 2 2	м	
D711 D713	8-719-924-06 8-719-911-19					RV 702   RV 703	1-230-619-11 1-237-749-11 1-237-749-11	RES, ADJ, MET RES, ADJ, CAR	AL GLA BON 22	ZE 110 00		
	JAC	<u>:K</u>				  *****	******	*****	*****	*****	****	*****
J701	1-526-798-51	SOCKET, CRT				   	*A-1345-720-A	D BOARD, COMP				
	COI	L					*4-341-751-01	PAWL				
L 704	1-410-878-21		33UH				*4-341-751-01 *4-341-752-01					
	<del>-</del>	*										



The components identified by shading and mark  $\triangle$  are critical for safety.

Replace only with part number specified.

Ref.No	o. Part No.	Description			Remark	Ref.No.	Part No.	Description			Remark
C001 C003 C004 C005	CAF 1-102-973-00 1-110-175-81 1-123-875-11 1-102-074-00	CERAMIC MYLAR ELECT CERAMIC	100 PF 0.1MF 10MF 0.001MF	5% 10% 20% 10%	50V 100V 50V 50V	C523 C524 C525 C526 C527	1-108-614-91 1-106-355-12 1-102-973-00 1-102-947-00 1-110-175-81	MYLAR MYLAR CERAMIC CERAMIC MYLAR	0.001MF 0.0033MF 100PF 10PF 0.1MF	10% 5% 5% 0.5PF 10%	100V 50V 50V 50V 100V
C007 C008 C009 C010 C011	1-110-171-81 1-101-880-00 1-101-884-00 1-126-101-11 1-101-004-00	MYLAR CERAMIC CERAMIC ELECT CERAMIC	0.047MF 47PF 56PF 100MF 0.01MF	10% 5% 5% 20%	100V 50V 50V 16V 50V	C531   C532   C533   C534   C536	1-124-117-00 1-124-122-11 1-110-173-81 1-124-120-11 1-131-365-00	ELECT ELECT MYLAR ELECT TANTALUM	680MF 100MF 0.068MF 220MF 10MF	10% 20% 10% 20% 10%	25V 50V 100V 16V 16V
C012 C013 C014 C015 C016	1-126-101-11 1-101-004-00 1-124-463-00 1-126-101-11 1-101-004-00	ELECT CERAMIC ELECT ELECT CERAMIC	100MF 0.01MF 0.1MF 100MF 0.01MF	20% 20% 20%	16V 50V 50V 16V 50V	C537 C538 C539 C591 C591	1-124-499-11 1-108-614-91 1-102-820-00 1-123-875-11 1-124-477-11	ELECT MYLAR CERAMIC ELECT ELECT	1MF 0.001MF 330PF 10MF 47MF	20% 10% 5% 20% 20%	50V 100V 50V 50V 16V
C017 C018 C019 C020 C021	1-123-875-11 1-102-980-00 1-110-171-81 1-102-973-00 1-102-973-00	ELECT CERAMIC MYLAR CERAMIC CERAMIC	10MF 270PF 0.047MF 100PF 100PF	20% 5% 10% 5% 5%	50V 50V 100V 50V 50V	C593   C601   C602   C603   C604	1-102-820-00 1-161-964-00 1-161-964-00 1-161-964-00 1-125-318-00	CERAMIC CERAMIC CERAMIC CERAMIC ELECT(BLOCK)	330PF 0.0047MF 0.0047MF 0.0047MF 220MF	5% 20%	50V 250V 250V 250V 400V
C022 C023 C024 C025 C026	1-124-477-11 1-124-499-11 1-124-499-11 1-102-125-00 1-102-125-00	ELECT ELECT ELECT CERAMIC CERAMIC	47MF 1MF 1MF 0.0047MF 0.0047MF	20% 20% 20% 10% 10%	16V 50V 50V 50V 50V	C605   C606   C607   C608   C611	1-124-122-11 1-110-175-81 1-130-019-00 1-123-875-11 1-124-122-11	ELECT MYLAR FILM ELECT ELECT	100MF 0.1MF 0.0012MF 10MF 100MF	20% 10% 5% 20% 20%	50V 100V 50V 50V 50V
C027 C028 C029 C251 C252	1-110-175-81 1-101-361-00 1-102-121-00 1-124-927-11 1-124-927-11	MYLAR CERAMIC CERAMIC ELECT ELECT	0.1MF 150PF 0.0022MF 4.7MF 4.7MF	10% 5% 10% 20% 20%	100 V 50 V 50 V 50 V 50 V	C612   C613   C614   C615   C616	1-162-115-00 1-136-088-00 1-102-030-00 1-124-557-11 1-102-030-00	CERAMIC FILM CERAMIC ELECT CERAMIC	330 PF 0.0022MF 330 PF 1000MF 330 PF	10% 3% 10% 20% 10%	2KV 2KV 500V 25V 500V
C253 C254 C255 C256 C257	1-124-122-11 1-124-927-11 1-124-927-11 1-110-175-81 1-101-004-00	ELECT ELECT ELECT MYLAR CERAMIC	100MF 4.7MF 4.7MF 0.1MF 0.01MF	20% 20% 20% 10%	50V 50V 50V 100V 50V	C618   C619   C620   C621   C622	1-124-637-11 1-124-556-11 1-102-074-00 1-124-347-00 1-124-556-11	ELECT ELECT CERAMIC ELECT ELECT	1000MF 2200MF 0.001MF 100MF 2200MF	20% 20% 10% 20% 20%	50V 16V 50V 160V 16V
C258 C260 C265 C266 C401	1-110-175-81 1-110-175-81 1-102-074-00 1-102-074-00 1-124-477-11	MYLAR MYLAR CERAMIC CERAMIC ELECT	0.1MF 0.1MF 0.001MF 0.001MF 47MF	10% 10% 10% 10% 20%	100 V 100 V 50 V 50 V 16 V	C623   C624   C625   C626   C627	1-124-910-11 1-124-122-11 1-124-360-00 1-123-875-11 1-102-074-00	ELECT ELECT ELECT ELECT CERAMIC	47MF 100MF 1000MF 10MF 0.001MF	20% 20% 20% 20% 10%	50V 50V 16V 50V 50V
C403 C501 C502 C503 C504	1-124-477-11 1-124-927-11 1-124-927-11 1-110-192-81 1-101-361-00	ELECT ELECT ELECT MYLAR CERAMIC	47MF 4.7MF 4.7MF 0.015MF 150PF	20% 20% 20% 10% 5%	16V 50V 50V 400V 50V	C628 C631 C632 C633 C636	1-124-360-00 1-124-927-11 1-102-074-00 1-124-927-11 1-123-258-91	ELECT ELECT CERAMIC ELECT ELECT	1000MF 4.7MF 0.001MF 4.7MF 3.3MF	20% 20% 10% 20% 20%	16V 50V 50V 50V 50V
C505 C506 C507 C508 C509	1-108-794-91 1-110-182-81 1-110-327-81 1-110-182-81 1-110-175-81	MYLAR MYLAR MYLAR MYLAR MYLAR	0.0015MF 0.022MF 0.33MF 0.022MF 0.1MF	5% 10% 10% 10% 10%	50V 250V 100V 250V 100V	C801 C802 C804 C805 C806	1-126-105-11 1-102-030-00 1-123-948-00 1-162-114-00 1-110-175-81	ELECT CERAMIC ELECT CERAMIC MYLAR	1000MF 330PF 22MF 0.0047MF 0.1MF	20% 10% 20%	35 V 500 V 250 V 2K V 100 V
C510 C511 C512 C513 C514	1-161-959-00 1-108-620-91 1-110-175-81 1-108-614-91 1-110-179-81	CERAMIC MYLAR MYLAR MYLAR MYLAR	22PF 0.0033MF 0.1MF 0.001MF 0.22MF	10% 10% 10% 10% 10%	500V 100V 100V 100V 100V	C807 C810 C811 C812 C813	1-106-395-00 1-123-024-00 1-136-117-00 1-123-943-00 1-102-212-00	MYLAR ELECT FILM ELECT CERAMIC	0.15MF 33MF 2MF 1MF 820PF	10% 5% 20% 10%	200V 160V 200V 250V 500V
C515 C516 C517 C518 C519	1-124-499-11 1-108-614-91 1-124-252-00 1-124-902-00 1-136-173-00	ELECT MYLAR ELECT ELECT FILM	1MF 0.001MF 0.33MF 0.47MF 0.47MF	20% 10% 20% 20% 5%	50V   100V   50V   50V	€819 🛦.	1-136-565-11 1-129-721-00 1-161-731-11	CERAMIC FILM FILM FILM CERAMIC	0.001MF 1MF 0.015MF 0.039MF 0.001MF	10% 5% 3% 10% 10%	2KV 200V 1.4KV 630V 2KV
C520 C521 C522	1-102-121-00 1-110-175-81 1-124-122-11	CERAMIC MYLAR ELECT	0.0022MF 0.1MF 100MF	10% 10% 20%	50V   100V   50V	C821 <b>⚠.</b> C822 C823	1-110-189-81 1-162-116-51 1-102-114-00 1-110-186-81 1-102-212-00	MYLAR CERAMIC CERAMIC MYLAR CERAMIC	0.0082MF 680PF 470PF 0.0047MF 820PF	10% 10% 10% 10% 10%	400V 2KV 50V 400V 500V

The components identified by shading and mark  $\hat{\Delta}$  are critical for safety.

Replace only with part number specified.



	****					
Ref.No. Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
	MYLAR 0.022MF 10% ELECT 10MF 20%	250 <b>V</b> 50 <b>V</b>	D613 D614 D615 D616 D617	8-719-924-06 8-719-924-06 8-719-109-90 8-719-109-93 8-719-109-93	DIODE ERC24-06S DIODE ERC24-06S DIODE RD5.6ES-B3 DIODE RD6.2ES-B2 DIODE RD6.2ES-B2	
CF001 1-567-686-11	and the second s		D618   D619   D620   D621	8-719-109-89 8-719-109-89 8-719-000-12 8-719-000-12	DIODE RD5.6ES-B2 DIODE RD5.6ES-B2 DIODE MC931 DIODE MC931	
COM	NECTOR		D622 	8-719-911-19	DIODE 1SS119	
CN801 *1-508-765-00 CND01 *1-564-884-11 CND02 *1-564-886-11 CND11 *1-566-660-11 CND12 *1-564-884-21	3P PLUG (M) PLUG, CONNECTOR 7P PLUG, CONNECTOR 9P CONNECTOR, HINGE (PLUG) 18P PLUG, CONNECTOR 7P		D623 D624 D627 D630 D632	8-719-911-19 8-719-911-19 8-719-911-19 8-719-110-39 8-719-110-16	DIODE 1SS119 DIODE 1SS119 DIODE 1SS119 DIODE RD15ES-B1 DIODE RD10ES-B1	
CND21 *1-564-346-00 CND23 *1-560-124-00 CND31 *1-564-346-00 CND41 *1-566-367-11 CND45 *1-564-882-11	CONNECTOR, BOARD TO BOARD 18P PLUG, CONNECTOR (2.5MM PITCH) CONNECTOR, BOARD TO BOARD 18P CONNECTOR, HINGE (RECEPTACLE) PLUG, CONNECTOR 5P		D633 D801 D802 D803 D804	8-719-911-19 8-719-924-06 8-719-924-06 8-719-300-65 8-719-911-55	DIODE 1SS119 DIODE ERC24-06S DIODE ERC24-06S DIODE ES1F DIODE U05G	
CND51 *1-566-367-11 CND64 *1-506-349-21 CND68 *1-564-879-11 CND82 *1-508-765-00 CND83 *1-508-786-00	CONNECTOR, HINGE (RECEPTACLE) 3P PLUG (L) PLUG, CONNECTOR 2P 3P PLUG (M) 2P PLUG (M)		D805 D806 D807 D808 D809	8-719-911-55 8-719-945-80 8-719-945-80 8-719-928-08 8-719-924-06	DIODE U05G DIODE ERC06-15S DIODE ERC06-15S DIODE ERD28-08S DIODE ERC24-06S	
CND84 *1-564-038-00	CONNECTOR PLUG, DY (MINI) 6P					
CND91 *1-560-123-00 CND92 *1-560-125-00 CND94 *1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P PLUG, CONNECTOR (2.5MM) 5P PLUG, CONNECTOR (2.5MM PITCH)		IC002	8-759-630-06 8-759-971-68 8-759-603-41	IC MB88503H-597G	
<u>D10</u>	<u>DDE</u>			8-759-157-40 8-759-803-31	IC UPC574J IC LA4280	
D001     8-719-911-19       D002     8-719-911-19       D003     8-719-911-19       D004     8-719-911-19       D005     8-719-109-71	DIODE 1SS119 DIODE 1SS119 DIODE 1SS119 DIODE 1SS119 DIODE RD3.9ES-B1		   IC401   IC501   IC502	*4-368-683-01 8-759-913-13 8-759-970-73 8-759-944-57 8-759-946-23	SPRING; IC251 IC CX20061	
D007 8-719-109-89 D008 8-719-110-85	DIODE RD5.6ES-B2 DIODE RD36ES-B4		1		HEAT SINK, IC; IC601	
D009 8-719-109-89 D011 8-719-911-19 D012 8-719-911-19	DIODE RD5.6ES-B2 DIODE 1SS119 DIODE 1SS119			<u>COI</u>	·	
D254     8-719-110-14       D501     8-719-911-19       D504     8-719-911-55       D506     8-719-000-12       D508     8-719-911-19	DIODE 1SS119 DIODE UO5G		L001   L501   L601   L602   L603	1-410-396-41	INDUCTOR 27UH INDUCTOR 3.3UH COIL, AIR CORE FERRITE BEAD INDUCTOR FERRITE BEAD INDUCTOR	
0509     8-719-911-19       0511     8-719-911-55       0512     8-719-911-55       0513     8-719-109-81       0591     8-719-911-19	DIODE 1SS119 DIODE UO5G DIODE UO5G DIODE RD4.7ES-B2 DIODE 1SS119		L605   L606   L607   L803   L804	1-459-442-00 1-421-013-00 1-410-482-31 1-459-104-00 1-408-239-00		
D592       8-719-911-19         D593       8-719-911-19         D601       8-719-946-90         D602       8-719-924-06         D603       8-719-911-55	DIODE 1SS119		L805   L806   L807   L809	1-459-652-11 1-459-115-00 1-408-242-00 *1-420-872-00 1-421-982-11	COIL, DCC-H INDUCTOR 10MMH COIL, AIR CORE	
0604     8-719-911-55       0605     8-719-911-55       0606     8-719-924-06       0607     8-719-924-06       0608     8-719-925-06	DIODE U05G DIODE U05G DIODE ERC24-06S DIODE ERC24-06S DIODE ERC25-06S		PS601 <u>A</u> PS602 <u>A</u>	IC 1-532-984-91 1-532-675-91	LINK LINK, IC LINK, IC	
D610 8-719-300-59 D611 8-719-928-08 D612 8-719-300-59	DIODE ERD28-06S		!   			



Ref.No.	Part No.	Description				Remark	Ref.No.	Part No.	Description				Remark
	TRA	NSISTOR					   R034	1-249-413-11	CARBON	470	5%	1/4W	
Q001		TRANSISTOR 2					R035	1-249-431-11 1-249-421-11	CARBON CARBON	15K 2.2K	5% 5%	1/4W 1/4W	
Q002 Q003	8-729-117-54 8-729-117-54	TRANSISTOR 2:					R037   R038	1-249-417-11 1-249-417-11	CARBON CARBON	1K 1K	5% 5%	1/4W 1/4W	
Q004 Q252	8-729-117-54 8-729-900-36	TRANSISTOR 2:	SA1175	:			R039						
				•			R040	1-249-417-11 1-249-417-11	CARBON CARBON	lK lK	5% 5%	1/4W 1/4W	
Q501 Q502	8-729-117-54 8-729-117-54	TRANSISTOR 2:	SA1175				R041   R042	1-249-417-11 1-249-417-11	CARBON CARBON	1K 1K	5% 5%	1/4W 1/4W	
Q503 Q505	8-729-178-54 8-729-177-43	TRANSISTOR 2:					R043	1-249-417-11	CARBON	1K	5%	1/4W	
Q506	8-729-103-43	TRANSISTOR 2					R044 R045	1-249-429-11	CARBON	10K	5 <b>%</b>	1/4W	
Q507	8-729-117-54	TRANSISTOR 2					R046	1-249-417-11 1-249-429-11	CARBON CARBON	1K 10K	5% 5%	1/4W 1/4W	
Q591 Q598	8-729-178-54 8-729-178-54	TRANSISTOR 2:	SC2785				R048   R049	1-249-417-11 1-249-417-11	CARBON CARBON	1K 1K	5% 5%	1/4W 1/4W	
Q601 Q602	8-729-904-32 8-729-209-02	TRANSISTOR 25					R050	1-249-433-11	CARBON	22K	5%	1/4W	
,	*4-368-683-01	SPRING; Q602					R051 R052	1-249-429-11	CARBON	10K	5%	1/4W	
Q603	8-729-904-32	TRANSISTOR 25					R053	1-249-439-11 1-249-437-11	CARBON CARBON	68K 47K	5% 5%	1/4W 1/4W	
Q604 Q605	8-729-308-92 8-729-178-54	TRANSISTOR 25		3C			R054 	1-249-417-11	CARBON	1K	5%	1/4W	
Q606	8-729-178-54	TRANSISTOR 25	SC2785				R056 R057	1-249-440-11 1-249-409-11	CARBON CARBON	82K 220	5% 5%	1/4W	
Q607 Q608	8-729-904-27	TRANSISTOR 25					R058	1-249-409-11	CARBON	220	5%	1/4W 1/4W	
	8-729-904-27 4-368-683-01	TRANSISTOR 25 SPRING; Q608					R059 R060	1-249-435-11 1-249-436-11	CARBON CARBON	33K 39K	5% 5%	1/4W 1/4W	
Q609 Q801	8-729-378-91 8-729-178-54	TRANSISTOR 25 TRANSISTOR 25					 ! R061	1-249-417-11	CARBON	1K	5%	1/4W	
0804	8-729-304-50	TRANSISTOR 25		ne.			R062	1-249-411-11	CARBON	330	5%	1/4W	
` *	4-368-683-01	SPRING; Q804		00			R063   R064	1-249-431-11 1-249-429-11	CARBON CARBON	15K 10K	5% 5%	1/4W 1/4W	
Q805	8-729-168-82	TRANSISTOR 25	SC2 <b>6</b> 88				R067	1-249-413-11	CARBON	470	5%	1/4W	
	RES	ISTOR					R068 R069	1-249-421-11 1-249-423-11	CARBON CARBON	2.2K 3.3K	5% 5%	1/4W 1/4W	
R001	1-249-417-11	CARBON	1ν	Eω	1 / 414		R070	1-249-417-11	CARBON	1K	5%	1/4W	
R002	1-249-417-11	CARBON	1K 1K	5% 5%	1/4W 1/4W			1-249-417-11 1-249-417-11	CARBON CARBON	1K 1K	5% 5%	1/4W 1/4W	
	1-249-417-11 1-249-417-11	CARBON CARBON	lK lK	5% 5%	1/4W 1/4W		   R073	1-249-417-11	CARBON	1ĸ	5%	1/4W	
R005	1-249-411-11	CARBON	330	5%	1/4W		R074	1-249-417-11	CARBON	1K	5%	1/4W	
	1-249-417-11	CARBON	1K	5%	1/4W	! !	R077	1-249-417-11 1-249-413-11	CARBON CARBON	1K 470	5% 5%	1/4W 1/4W	
R008	1 -249-405-11 1 -249-417-11	CARBON CARBON	100 1K	5% 5%	1/4W 1/4W		R078	1-249-423-11	CARBON	3.3K	5 <b>%</b>	1/4W	
R009 R010	1 -249-417-11 1 -249-413-11	CARBON CARBON	1K 470	5% 5%	1/4W 1/4W	į		1-249-435-11 1-249-429-11		33K	5%	1/4W	
	_					ļ	R081	1-249-441-11	CARBON CARBON	10K 100K		1/4W 1/4W	
R012	1-249-417-11	CARBON CARBON	1K 1K	5% 5%	1/4W 1/4W	!		1-249-429-11 1-249-413-11	CARBON CARBON	10K 470	5% 5%	1/4W 1/4W	
	1 -249-417-11 1 -249-417-11	CARBON CARBON	lK lK	5% 5%	1/4W 1/4W	İ		1-249-429-11	CARBON				
R016	1-249-429-11	CARBON	10K	5%	1/4W	ļ	R086	1-249-417-11	CARBON	10K 1K	5% 5%	1/4W 1/4W	
R017	1-249-417-11	CARBON	1K	5%	1/4W	ļ		1-249-417-11 1-249-425-11	CARBON CARBON	1K 4.7K	5% 5%	1/4W 1/4W	
R018 R019	1 -249-417-11 1 -249-433-11	CARBON CARBON	1 K 22 K	5% 5%	1/4W 1/4W		R090	1-249-413-11	CARBON	470	5%	1/4W	
R020	1 -249-433-11 1 -249-433-11	CARBON	22K	<b>5%</b>	1/4W			1-249-409-11	CARBON	220	5 <b>%</b>	1/4W	
		CARBON	22K	5%	1/4W	1		1-249-429-11 1-249-429-11	CARBON CARBON	10K 10K	5% 5%	1/4W 1/4W	
R023	1 -249-433-11 1 -249-429-11	CARBON CARBON	22K 10K	5% 5%	1/4W 1/4W	ļ		1-249-409-11 1-249-409-11	CARBON CARBON	220 220	5% 5%	1/4W	
R024 R025	1 -249-429-11 1 -249-417-11	CARBON CARBON	10K 1K	5% 5%	1/4W 1/4W	į						1/4W	
	1-249-417-11	CARBON	1K	5%	1/4W	ļ	R098	1-249-429-11 1-249-429-11	CARBON CARBON	10K 10K	5% 5%	1/4W 1/4W	
R027	1 -249-417-11	CARBON	1K	5%	1/4W	! !		1-215-900-11 1-249-417-11	METAL OXIDE CARBON	22K 1K	5% 5%	2W F 1/4W	
R029	1 -249-417-11 1 -249-417-11	CARBON CARBON	1K 1K	5% 5%	1/4W 1/4W	Ì		1-249-413-11	CARBON	470	5%	1/4W	
R030	1-249-425-11	CARBON	4.7K	5%	1/4W	ļ		1-249-413-11	CARBON	470	5 <b>%</b>	1/4W	
		CARBON	10K	5%	1/4W		R256	1-249-385-11 1-249-385-11	CARBON CARBON	2.2	5% 5%	1/4W F 1/4W F	
	1 -249-417-11 1 -249-413-11	CARBON CARBON	1K 470	5% 5%	1/4W 1/4W	ļ	R260	1-249-393-11 1-249-429-11	CARBON	10 10K	5%	1/4W	
				•		'		1 1	CARBON	TOK	5 <b>%</b>	1/4W	



Ref.   2-79-311-11   CARRON   0-70   54   1/44   Ref.   8-79   1-249-40-51   CARRON   100   54   1/44   Ref.   1-249-40-51   CARRON   100   54   1/44   Ref.   1-249-40-51   CARRON   100   55   1/44   Ref.   1-249-40-51   CARRON   100   10													L
Response   1-249-421-11   CARBON   2,2 K   5 K   1/4W   Response   1-249-425-11   CARBON   47 K   5 K   1/4W   Response   1-249-425-11   CARBON   47 K   5 K   1/4W   Response   1-249-425-11   CARBON   47 K   5 K   1/4W   Response   1-249-425-11   CARBON   47 K   5 K   1/4W   Response   1-249-425-11   CARBON   47 K   5 K   1/4W   Response   1-249-425-11   CARBON   530 S K   1/4W   Response   1-249-425-11   CARBON   530 S K   1/4W   Response   1-249-425-11   CARBON   530 S K   1/4W   Response   1-249-425-11   CARBON   530 S K   1/4W   Response   1-249-425-11   CARBON   10 K   5 K   1/4W   Response   1-249-425	Ref.No. Part No.	Description				Remark	Ref.No.	Part No.	Description				Remark
\$1.249-435-11   \$CARDON   \$470   \$5.5   \$1/4W   \$1.249-425-11   \$CARDON   \$1.00   \$5.5   \$1/4W   \$1.249-413-11   \$CARDON   \$470   \$5.5   \$1/4W   \$1.249-413-11   \$CARDON   \$1.00   \$5.5   \$1/4W   \$1.249-413-11   \$CARDON   \$1.00   \$5.5   \$1/4W   \$1.249-413-11   \$CARDON   \$1.00   \$5.5   \$1/4W   \$1.249-413-11   \$CARDON   \$470   \$5.5   \$1/4W   \$1.249-413-11   \$CARDON	R263 1-249-421-1 R264 1-249-421-1 R265 1-249-425-1	1 CARBON 1 CARBON 1 CARBON	2.2K 2.2K 4.7K	5% 5% 5%	1/4W 1/4W 1/4W		R557   R558   R559	1-249-425-11 1-247-895-00 1-249-427-11	CARBON CARBON CARBON	4.7K 470K 6.8K	5% 5% 5%	1/4W 1/4W 1/4W	
R502   1-249-413-11   CARBON   270   5%   1/4W   R508   1-249-405-11   CARBON   670   5%   1/4W   R509   1-249-405-11   CARBON   100   5%   1/4W   R506   1-249-405-11   CARBON   100   5%   1/4W   R506   1-249-405-11   CARBON   39.0   5%   1/4W   R506   1-259-405-00   RETAL (DID C R500   5%   1/4W   R506   1-249-405-11   CARBON   39.0   5%   1/4W   R506   1-259-405-00   RETAL (DID C R500   5%   1/4W   R506   1-259-405-00   RETAL (DID C R500   5%   1/4W   R506   1-249-405-11   CARBON   39.0   5%   1/4W   R506   1-259-405-00   RETAL (DID C R500   5%   1/4W   R506   1-259-405-00   RETAL (DID C R500   5%   1/4W   R506   1-259-405-01   CARBON   39.0   5%   1/4W   R506   1-259-405-01   CARBON   39.0   5%   1/4W   R506   1-249-405-11   CARBON   10%   5%   1/4W   R506   1-249-305-11   CARBON   27.0   5%   1/4W   R506   1-249-305-11   CARBON   27.0   5%   1/4W   R506   1-249-305-11   CARBON   27.0   5%   1/4W   R506   1-249-305-11   CARBON   10%   5%   1/4W   R506   1-249-305-11   CARBON   27.0   5%   1/4W   R506   1-249-405-11   CARBON   10%   5%   1	R402 1-249-435-1 R410 1-249-413-1 R411 1-249-413-1	1 CARBON 1 CARBON 1 CARBON	33K 470 470	5% 5% 5%	1/4W 1/4W 1/4W		R592   R593   R594	1-249-429-11 1-249-429-11 1-249-424-11	CARBON CARBON CARBON	10K 10K 3.9K	5% 5% 5%	1/4W 1/4W 1/4W	
R506   1-249-428-11   CARBON   8.2K   5%   1/4W   R609   1-224-640-00   CARBON   560   5%   1/4W   R509   1-249-426-00   CARBON   3.9K   5%   1/4W   R606   1-215-400-00   CARBON   6.2K   5%   1/4W   R606   1-215-400-00   CARBON   6.2K   5%   1/4W   R606   1-215-400-00   CARBON   6.2K   5%   1/4W   R608   1-215-401-00   METAL (XIDE   33K   5%   2%   5%   1/4W   R613   1-249-429-11   CARBON   10K   5%   1/4W   R613   1-249-438-11   CARBON   10K   5%   1/4W   R613   1-249-438-11   CARBON   2.2   5%   1/4W   R613   1-249-438-11   CARBON   2.2   5%   1/4W   R615   1-249-439-11   CARBON   3.3K   5%   1/4W   R616   1-239-319-11   MIRKUNIDO   0.27   10X   2W   F   1/4W   R616   1-239-319-11   MIRKUNIDO   0.27   10X   2W   F   1/4W   R616   1-239-319-11   MIRKUNIDO   0.27   10X   1/4W   R619   1-249-431-11   CARBON   3.30   5%   1/4W   R616   1-239-319-11   MIRKUNIDO   2.2D   10X   10W   R629   1-249-431-11   CARBON   3.30   5%   1/4W   R616   1-239-319-11   MIRKUNIDO   2.2D   10X   10W   R629   1-249-431-11   CARBON   3.30   5%   1/4W   R619   1-249-432-11   CARBON   3.30   5%   1/4W   R629   1-249-431-11   CARBON   3.30   5%   1/4W   R629   1-249-431-11   CARBON   10K   5%   1/4W   R629   1-249-31-31   CARBON   10K   5%   1/4W   R629   1-249-31-31   CARBON   10K   5%   1/4W   R629   1-24	R501 1-249-413-1 R502 1-249-409-1 R503 1-249-410-1	1 CARBON 1 CARBON 1 CARBON	470 220 270	5% 5% 5%	1/4W 1/4W 1/4W		R597   R598   R599	1-249-425-11 1-249-405-11 1-249-405-11	CARBON CARBON CARBON	4.7K 100 100	5% 5% 5%	1/4W 1/4W 1/4W	F
R512   1-247-891-00   CARBON   330X   5%   1/4W   R610   1-249-401-11   CARBON   2.7   5%   1/4W   R513   1-249-409-11   CARBON   2.2   5%   1/4W   R614   1-249-385-11   CARBON   2.2   5%   1/4W   R615   1-249-409-11   CARBON   2.2   5%   1/4W   R615   1-249-385-11   CARBON   2.2   5%   1/4W   R615   1-249-401-11   CARBON   0.27   10½   2W   F   R616   1-249-401-11   CARBON   1/2   2W   1	R506 1-249-428-1 R507 1-247-891-0 R509 1-249-424-1	1 CARBON CARBON 1 CARBON	8.2K 330K 3.9K	5% 5% 5%	1/4W 1/4W 1/4W		R604 R605 R606	1-249-414-11 1-215-469-00 1-215-440-00	CARBON METAL CARBON	560 100K 6.2K	5% 1% 5%	1/4W 1/6W 1/4W	F
RS18 1-249-437-11 CARBON 10K 5% 1/4W RS18 1-205-919-11 WIREMOND 220 10% 10W F RS18 1-249-437-11 CARBON 47K 5% 1/4W RS19 1-249-437-11 CARBON 30 5% 1/4W RS19 1-249-437-11 CARBON 30 5% 1/4W RS19 1-249-437-11 CARBON 30 5% 1/4W RS19 1-249-411-11 CARBON 30 5% 1/4W RS29 1-249-411-11 CARBON 30 5% 1/4W RS29 1-249-411-11 CARBON 10K 5% 1/4W RS29 1-249-417-11 CARBON 10K 5% 1/4W RS29 1-249-417-11 CARBON 10K 5% 1/4W RS29 1-249-417-11 CARBON 20 5% 1/4W RS29 1-249-417-11 CARBON 20 5% 1/4W RS29 1-249-417-11 CARBON 20 5% 1/4W RS29 1-249-417-11 CARBON 20 5% 1/4W RS29 1-249-417-11 CARBON 20 5% 1/4W RS29 1-249-417-11 CARBON 20 5% 1/4W RS29 1-249-417-11 CARBON 10K 5% 1/4W RS29 1-249-417-11 CARBON 10K 5% 1/4W RS29 1-249-417-11 CARBON 10K 5% 1/4W RS29 1-249-417-11 CARBON 10K 5% 1/4W RS29 1-249-417-11 CARBON 10K 5% 1/4W RS29 1-249-417-11 CARBON 10K 5% 1/4W RS29 1-249-417-11 CARBON 10K 5% 1/4W RS29 1-249-417-11 CARBON 10K 5% 1/4W RS29 1-249-401-11	R512 1-247-891-0 R513 1-249-429-1 R514 1-249-409-1	OO CARBON 1 CARBON 1 CARBON	330K 10K 220	5% 5% 5%	1/4W 1/4W 1/4W		R609   R610   R611	1-249-401-11 1-249-385-11 1-249-385-11	CARBON CARBON CARBON	47 2.2 2.2	5% 5% 5%	1/4W 1/4W 1/4W	F F
R522 1-215-469-00 METAL 100K 1% 1/6W R523 1-249-433-11 CARBON 22K 5% 1/4W R524 1-249-421-11 CARBON 1K 5% 1/4W R524 1-249-421-11 CARBON 1K 5% 1/4W R525 1-249-421-11 CARBON 1K 5% 1/4W R525 1-249-421-11 CARBON 1K 5% 1/4W R525 1-249-421-11 CARBON 1K 5% 1/4W R525 1-249-421-11 CARBON 1K 5% 1/4W R525 1-249-421-11 CARBON 1K 5% 1/4W R525 1-249-421-11 CARBON 1K 5% 1/4W R525 1-249-431-11 CARBON 15K 5% 1/4W R525 1-249-431-11 CARBON 15K 5% 1/4W R526 1-249-431-11 CARBON 15K 5% 1/4W R526 1-249-431-11 CARBON 180 5% 1/4W R526 1-249-431-11 CARBON 180 5% 1/4W R526 1-249-431-11 CARBON 180 5% 1/4W R526 1-249-431-11 CARBON 180 5% 1/4W R526 1-249-431-11 CARBON 1.2 5% 1/4W R526 1-249-393-11 CARBON 10 5% 1/4W R530 1-249-431-11 CARBON 1.2 5% 1/4W R530 1-249-431-11 CARBON 1.2 5% 1/4W R531 1-249-431-11 CARBON 1.2 5% 1/4W R531 1-249-431-11 CARBON 1.2 5% 1/4W R531 1-249-431-11 CARBON 1.2 5% 1/4W R531 1-249-431-11 CARBON 1.2 5% 1/4W R531 1-249-431-11 CARBON 1.2 5% 1/4W R531 1-249-431-11 CARBON 1.2 5% 1/4W R531 1-249-431-11 CARBON 1.2 5% 1/4W R531 1-249-431-11 CARBON 1.2 5% 1/4W R531 1-249-431-11 CARBON 1.2 5% 1/4W R531 1-249-439-10 CARBON 1.2 5% 1/4W R531 1-249-439-11 CARBON 1.2 5% 1/4W R531 1-249-439-11 CARBON 1.2 5% 1/4W R531 1-249-439-11 CARBON 1.2 5% 1/4W R531 1-249-39-10 CARBON 1.5 5% 1/4W R531 1-249-39-10 CARBON 1.5 5% 1/4W R531 1-249-39-10 CARBON 1.5 5% 1/4W R531 1-249-39-11 CARBON 1.5 5% 1/4W R531 1-249-39-11 CARBON 1.5 5% 1/4W R531 1-249-39-11 CARBON 1.5 5% 1/4W R531 1-249-39-11 CARBON 1.5 5% 1/4W R531 1-249-39-11 CARBON 1.5 5% 1/4W R531 1-249-39-11 CARBON 1.5 5% 1/4W R531 1-249-39-11 CARBON 1.5 5% 1/4W R531 1-249-39-11 CARBON 1.5 5% 1/4W R531 1-249-39-11 CARBON 1.5 5% 1/4W R531 1-249-39-11 CARBON 1.5 5% 1/4W R531 1-249-39-11 CARBON 1.5 5% 1/4W R531 1-249-39-11 CARBON 1.5 5% 1/4W R531 1-249-39-11 CARBON 1.5 5% 1/4W R531 1-249-39-11 CARBON 1.5 5% 1/4W R531 1-249-39-11 CARBON 1.5 5% 1/4W R531 1-249-39-11 CARBON 1.5 5% 1/4W R531 1-249-39-11 CARBON 1.2 5% 1/4W R531 1-249-39-11 CARBON 1.2 5% 1/4W R531 1-249-39-11 CARBON 1.2 5% 1/4W R531	R517 1-249-429-1 R518 1-249-437-1 R519 1-249-433-1	.1 CARBON .1 CARBON .1 CARBON	10K 47K 22K	5% 5% 5%	1/4W 1/4W 1/4W		R614 R616 R617	1-205-919-11 1-249-417-11 1-249-411-11	WIREWOUND CARBON CARBON	220 1K 330	10% 5% 5%	10W 1/4W 1/4W	F
R527 1-249-431-11 CARBON 15K 5% 1/4W R626 1-249-441-11 CARBON 330 5% 1/4W R529 1-249-408-11 CARBON 180 5% 1/4W R626 1-249-4411-11 CARBON 330 5% 1/4W R529 1-249-448-11 CARBON 1.2 5% 1/4W R627 1-218-019-51 METAL (OXIDE 32) 5% 1W R530 1-249-448-11 CARBON 1.2 5% 1/4W R627 1-218-019-51 METAL (OXIDE 33) 5% 1/4W R531 1-247-881-00 CARBON 1 120K 5% 1/4W R628 1-249-393-11 CARBON 10 5% 1/4W R531 1-249-417-11 CARBON 1 1 5% 1/4W R630 1-249-437-11 CARBON 330 5% 1/4W R531 1-249-417-11 CARBON 1 1 5% 1/4W R630 1-249-437-11 CARBON 330 5% 1/4W R531 1-249-479-00 CARBON 820K 5% 1/4W R630 1-249-437-11 CARBON 100 5% 1/4W R535 1-249-479-00 CARBON 2.2M 5% 1/4W R634 1-218-020-51 METAL (OXIDE 390 5% 1)W R637 1-249-434-11 CARBON 2.7K 5% 1/4W R634 1-218-020-51 METAL (OXIDE 390 5% 1)W R537 1-249-439-11 CARBON 10K 5% 1/4W R631 1-249-439-11 CARBON 10K 5% 1/4W R533 1-249-833-00 CARBON 150K 5% 1/4W R636 1-249-429-11 CARBON 10K 5% 1/4W R538 1-247-883-00 CARBON 150K 5% 1/4W R643 1-216-343-00 METAL (OXIDE 0.33 5% 1)W F8540 1-249-399-11 CARBON 330 5% 1/4W R647 1-216-485-11 METAL (OXIDE 0.33 5% 1)W F8540 1-249-339-11 CARBON 330 5% 1/4W R647 1-216-485-11 METAL (OXIDE 5.6K 5% 3)W F R540 1-249-339-11 CARBON 330 5% 1/4W R649 1-249-398-11 CARBON 10K 5% 1/4W R544 1-247-745-11 CARBON 4.7K 5% 1/4W R650 1-249-417-11 CARBON 10K 5% 1/4W R544 1-247-745-11 CARBON 22K 5% 1/4W R650 1-249-417-11 CARBON 10K 5% 1/4W R544 1-247-745-11 CARBON 22K 5% 1/4W R650 1-249-417-11 CARBON 10K 5% 1/4W R544 1-249-33-11 CARBON 22K 5% 1/4W R650 1-249-439-11 CARBON 10K 5% 1/4W R544 1-249-343-11 CARBON 330 5% 1/4W R650 1-249-443-11 CARBON 10K 5% 1/4W R544 1-249-343-11 CARBON 22K 5% 1/4W R650 1-249-443-11 CARBON 10K 5% 1/4W R544 1-249-343-11 CARBON 22K 5% 1/4W R650 1-249-443-11 CARBON 10K 5% 1/4W R544 1-249-343-11 CARBON 22K 5% 1/4W R650 1-249-443-11 CARBON 10K 5% 1/4W R544 1-249-343-11 CARBON 22K 5% 1/4W R650 1-249-443-11 CARBON 10K 5% 1/4W R544 1-249-343-11 CARBON 22K 5% 1/4W R650 1-249-443-11 CARBON 10K 5% 1/4W R544 1-249-343-11 CARBON 22K 5% 1/4W R650 1-249-443-11 CARBON 10K 5% 1/4	R522 1-215-469-0 R523 1-249-417-1 R524 1-249-421-1	00 METAL .1 CARBON .1 CARBON	100K 1K 2.2K	1% 5% 5%	1/6W 1/4W 1/4W		R620 R621 R622	1-249-433-11 1-249-431-11 1-249-429-11	CARBON CARBON CARBON	22K 15K 10K	5% 5% 5%	1/4W 1/4W 1/4W	F
R532 1-249-417-11 CARBON 1K 5% 1/4W R630 1-249-437-11 CARBON 47K 5% 1/4W R534 1-215-491-00 CARBON 820K 5% 1/4W R633 1-249-405-11 CARBON 100 5% 1/4W R535 1-249-749-00 CARBON 2.2M 5% 1/4W R634 1-218-020-51 METAL OXIDE 390 5% 1W R635 1-249-429-11 CARBON 10K 5% 1/4W R537 1-249-439-10 CARBON 2.2M 5% 1/4W R636 1-249-429-11 CARBON 10K 5% 1/4W R537 1-249-439-10 CARBON 150K 5% 1/4W R636 1-249-429-11 CARBON 10K 5% 1/4W R538 1-247-883-00 CARBON 150K 5% 1/4W R642 1-216-343-00 METAL OXIDE 0.33 5% 1W F R540 1-249-399-11 CARBON 150K 5% 1/4W R643 1-217-192-21 WIREMOUND 0.22 10% 2W F R540 1-249-399-11 CARBON 33 5% 1/4W R647 1-216-485-11 METAL OXIDE 5.6K 5% 3W F R641 1-249-438-11 CARBON 4.7K 5% 1/4W R648 1-216-348-11 METAL OXIDE 5.6K 5% 3W F R540 1-249-422-11 CARBON 4.7K 5% 1/4W R649 1-249-385-11 CARBON 1K 5% 1/4W R544 1-247-745-11 CARBON 4.7K 5% 1/4W R650 1-249-405-11 CARBON 1K 5% 1/4W R544 1-249-333-11 CARBON 22K 5% 1/4W R655 1-249-405-11 CARBON 1K 5% 1/4W R654 1-249-333-11 CARBON 22K 5% 1/4W R655 1-249-405-11 CARBON 1K 5% 1/4W R654 1-249-333-11 CARBON 22K 5% 1/4W R655 1-249-405-11 CARBON 1M 5% 1/4W R654 1-249-333-11 CARBON 27K 5% 1/4W R655 1-249-405-11 CARBON 1M 5% 1/4W R654 1-249-343-11 CARBON 33 5% 1/4W R655 1-249-405-11 CARBON 1D 5% 1/4W R654 1-249-343-11 CARBON 27K 5% 1/4W R655 1-249-405-11 CARBON 1D 5% 1/4W R654 1-249-343-11 CARBON 33 5% 1/4W R655 1-249-405-11 CARBON 1D 5% 1/4W R654 1-249-433-11 CARBON 33 5% 1/4W R655 1-249-405-11 CARBON 1D 5% 1/4W R654 1-249-343-11 CARBON 33 5% 1/4W R655 1-249-405-11 CARBON 1D 5% 1/4W R654 1-249-405-11 CARBON 1D 5% 1/4W R654 1-249-405-11 CARBON 1D 5% 1/4W R655 1-249-405-11 CARBON 1D 5% 1/4W R654 1-249-405-11 CARBON 1D 5% 1/4W R655 1-249-405-11 CARBON 1D 5% 1/4W R655 1-249-405-11 CARBON 1D 5% 1/4W R655 1-249-405-11 CARBON 1D 5% 1/4W R655 1-249-405-11 CARBON 1D 5% 1/4W R655 1-249-405-11 CARBON 1D 5% 1/4W R655 1-249-405-11 CARBON 1D 5% 1/4W R655 1-249-405-11 CARBON 1D 5% 1/4W R655 1-249-405-11 CARBON 1D 5% 1/4W R655 1-249-405-11 CARBON 1D 1D 1D 1D 1D 1D 1D 1D 1D 1D 1D 1D 1D	R527 1-249-431-1 R528 1-249-408-1 R529 1-249-427-1	.1 CARBON .1 CARBON .1 CARBON	15K 180 <b>6.</b> 8K	5% 5% 5%	1/4W 1/4W 1/4W		R625 R626 R627	1-218-017-51 1-249-411-11 1-218-019-51	METAL OXIDE CARBON METAL OXIDE	220 330 330	5% 5% 5%	1W 1/4W 1W	
R537 1-249-434-11 CARBON 27K 5% 1/4W R636 1-249-429-11 CARBON 10K 5% 1/4W R538 1-247-883-00 CARBON 150K 5% 1/4W R642 1-216-343-00 METAL OXIDE 0.33 5% 1W F R540 1-249-399-11 CARBON 33 5% 1/4W R643 1-217-192-21 WIREWOUND 0.22 10% 2W F R540 1-249-399-11 CARBON 33 5% 1/4W R647 1-216-485-11 METAL OXIDE 5.6K 5% 3W F R648 1-216-485-11 METAL OXIDE 5.6K 5% 3W F R642 1-249-425-11 CARBON 4.7K 5% 1/4W R647 1-216-485-11 METAL OXIDE 5.6K 5% 3W F R642 1-249-425-11 CARBON 4.7K 5% 1/4W R649 1-249-385-11 CARBON 1K 5% 1/4W R654 1-249-425-11 CARBON 330 5% 1/4W R650 1-249-417-11 CARBON 1K 5% 1/4W R544 1-247-745-11 CARBON 330 5% 1/2W R651 1-249-405-11 CARBON 100 5% 1/4W R545 1-249-433-11 CARBON 22K 5% 1/4W R651 1-249-405-11 CARBON 100 5% 1/4W R654 1-249-433-11 CARBON 22K 5% 1/4W R652 1-215-493-00 CARBON 100 5% 1/4W R654 1-249-433-11 CARBON 27K 5% 1/4W R652 1-215-493-00 CARBON 100 5% 1/4W R654 1-249-433-11 CARBON 27K 5% 1/4W R654 1-249-433-11 CARBON 0.47 5% 1/4W R654 1-249-431-11 CARBON 0.47 5% 1/4W R655 1-249-443-11 CARBON 0.47 5% 1/4W R655 1-249-439-11 CARBON 0.47 5% 1/4W R655 1-249-439-11 CARBON 0.47 5% 1/4W R655 1-249-439-11 CARBON 0.47 5% 1/4W R655 1-249-440-11 CARBON 0.47 5% 1/4W R809 1-202-821-11 SOLID 1.8K 10% 1/2W R855 1-249-440-11 CARBON 0.47 5% 1/4W R809 1-202-821-11 SOLID 1.8K 10% 1/2W R855 1-249-440-11 CARBON 0.47 5% 1/4W R809 1-202-818-00 SOLID 1 K 10% 1/2W R855 1-249-440-11 CARBON 0.47 5% 1/4W R809 1-202-818-00 SOLID 1 K 10% 1/2W R855 1-249-440-11 CARBON 0.330 5% 1/4W R815 1-215-882-00 METAL OXIDE 47 5% 2W F R855 1-249-449-00 CARBON 0.330 5% 1/4W R815 1-215-882-00 METAL OXIDE 47 5% 2W F R855 1-249-749-00 CARBON 0.330 5% 1/4W R816 1-218-023-51 METAL OXIDE 47 5% 2W F R855 1-249-749-00 CARBON 0.330 5% 1/4W R816 1-218-023-51 METAL OXIDE 47 5% 2W F R855 1-249-749-00 CARBON 0.330 5% 1/4W R816 1-218-023-51 METAL OXIDE 680 5% 1W	R532 1-249-417-1 R534 1-215-491-0 R535 1-249-749-0	1 CARBON CARBON CARBON	1K 820K 2.2M	5% 5% 5%	1/4W 1/4W 1/4W		R630   R633   R634	1-249-437-11 1-249-405-11 1-218-020-51	CARBON CARBON METAL OXIDE	47K 100 390	5% 5% 5%	1/4W 1/4W 1W	
R541 1-249-438-11 CARBON 56K 5% 1/4W R542 1-249-425-11 CARBON 4.7K 5% 1/4W R543 1-215-088-00 METAL 2.2 5% 1/4W R543 1-215-088-00 METAL 2.2 5% 1/4W R543 1-215-088-00 METAL 2.2 5% 1/4W R544 1-247-745-11 CARBON 330 5% 1/2W R651 1-249-405-11 CARBON 100 5% 1/4W R545 1-249-433-11 CARBON 22K 5% 1/4W R652 1-215-493-00 CARBON 1M 5% 1/4W R802 1-249-443-11 CARBON 0.47 5% 1/4W R802 1-249-443-11 CARBON 0.47 5% 1/4W R8548 1-216-349-00 METAL 0XIDE 1 5% 1/4W R8548 1-216-349-00 METAL 0XIDE 1 5% 1/4W R548 1-215-890-11 METAL 0XIDE 470 5% 2W F R806 1-249-439-11 CARBON 68K 5% 1/4W R550 1-249-440-11 CARBON 82K 5% 1/4W R809 1-202-821-11 SOLID 1.8K 10% 1/2W R8551 1-249-749-00 CARBON 82K 5% 1/4W R809 1-202-821-11 SOLID 1.8K 10% 1/2W R8551 1-218-026-51 METAL 0XIDE 1 5% 1W R810 1-202-818-00 SOLID 1 1.0K 10% 1/2W R8553 1-218-025-51 METAL 0XIDE 1 1.2K 5% 1W R811 1-215-882-00 METAL 0XIDE 22 5% 2W R554 1-249-411-11 CARBON 330 5% 1/4W R815 1-215-884-11 METAL 0XIDE 47 5% 2W F R555 1-249-749-00 CARBON 2.2M 5% 1/4W R815 1-215-884-11 METAL 0XIDE 680 5% 1W	R537 1-249-434-1 R538 1-247-883-0 R539 1-247-883-0 R540 1-249-399-1	1 CARBON CARBON CARBON CARBON	27K 150K 150K	5% 5% 5%	1/4W 1/4W 1/4W		R642   R643   R647	1-216-343-00 1-217-192-21 1-216-485-11	METAL OXIDE WIREWOUND METAL OXIDE	0.33 0.22 5.6K	5% 10% 5%	1W 2W 3W	F F
R546 1-249-434-11 CARBON 27K 5% 1/4W	R542 1-249-425-1 R543 1-215-088-( R544 1-247-745-1 R545 1-249-433-1	1 CARBON O METAL 1 CARBON 1 CARBON	4.7K 2.2 330	5% 5% 5%	1/4W 1/4W 1/2W		R650 R651 R652	1-249-385-11 1-249-417-11 1-249-405-11 1-215-493-00	CARBON CARBON CARBON CARBON	2.2 1K 100 1M	5% 5% 5% 5%	1/4W 1/4W 1/4W	E
R551 1-249-749-00 CARBON 2.2M 5% 1/4W   R552 1-218-026-51 METAL OXIDE 1.2K 5% 1W   R811 1-215-882-00 METAL OXIDE 22 5% 2W R553 1-218-025-51 METAL OXIDE 1K 5% 1W   R812 1-244-917-00 CARBON 68K 5% 1/2W R554 1-249-411-11 CARBON 330 5% 1/4W   R815 1-215-884-11 METAL OXIDE 47 5% 2W F R555 1-249-749-00 CARBON 2.2M 5% 1/4W   R816 1-218-023-51 METAL OXIDE 680 5% 1W	R547 1-249-423-1 R548 1-216-349-0 R549 1-215-890-1 R550 1-249-440-1	1 CARBON 10 METAL OXIDE 1 METAL OXIDE 1 CARBON	3.3K 1 470	5% 5% 5%	1/4W 1W 2W		   R805   R806   R807   R809	1-249-448-11 1-249-439-11 1-218-025-51 1-202-821-11	CARBON CARBON METAL OXIDE SOLID	1.2 68K 1K 1.8K	5% 5% 5% 10%	1/4W 1/4W 1W 1/2W	
R817 1-249-417-11 CARBON 1K 5% 1/4W	R552 1-218-026-5 R553 1-218-025-5 R554 1-249-411-1	1 METAL OXIDE 1 METAL OXIDE 1 CARBON	1.2K 1K 330	5% 5% 5%	1W 1W 1/4W		R811   R812   R815   R816	1-215-882-00 1-244-917-00 1-215-884-11 1-218-023-51	METAL OXIDE CARBON METAL OXIDE METAL OXIDE	22 68K 47 680	5% 5% 5% 5%	2W 1/2W 2W 1W	F



The components identified by shading and mark 🛆 are critical for safety.

Replace only with part number specified.

										***************************************		
Ref.No.	Part No.	Description				Remark	Ref.No.	Part No.	Description			Remark
R820 R821 R822 R825 R826	1-249-403-11 1-247-725-11 1-217-778-11 1-216-345-11 1-249-441-11	CARBON CARBON FUS IBLE METAL OX IDE CARBON	68 10K 1K 0.47 100K	5% 5% 5% 5%	1/4W 1/4W 1W 1W 1/4W	F F F	C19 C20 C21 C24 C25	1-110-171-81 1-102-978-00 1-110-173-81 1-126-101-11 1-124-477-11	CERAMIC	0.047MF 220PF 0.068MF 100MF 47MF	10% 5% 10% 20% 20%	100V 50V 100V 16V 16V
R827 R828 R829 R830 R831	1-249-429-11 1-249-423-11 1-249-416-11 1-249-429-11 1-215-088-00	CARBON CARBON CARBON CARBON METAL	10K 3.3K 820 10K 2.2	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		C27 C28 C29 C51 C52	1-102-820-00 1-102-116-00 1-124-927-11 1-110-175-81 1-110-175-81	CERAMIC ELECT MYLAR	330 PF 680 PF 4.7MF 0.1MF	5% 10% 20% 10%	50V 50V 50V 100V
R1001 R1002 R1004 R1006 R1007	1-249-421-11 1-249-423-11 1-249-408-11 1-249-408-11 1-249-408-11	CARBON CARBON CARBON CARBON CARBON	2.2K 3.3K 180 180 180	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		C53 C54 C55 C56 C57	1-110-175-81 1-110-175-81 1-110-175-81 1-110-175-81 1-102-074-00	MYLAR MYLAR	0.1MF 0.1MF 0.1MF 0.1MF 0.001MF	10% 10% 10% 10% 10%	100V 100V 100V 100V 50V
R5501 R5502 R5503 R5504	1-249-429-11 1-249-417-11 1-249-389-11 1-215-493-00	CARBON CARBON CARBON CARBON	10K 1K 4.7 1M	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W		C58 C59	1-102-074-00 1-102-074-00		0.001MF 0.001MF	10% 10%	50 <b>v</b> 50 <b>v</b>
	1-249-393-11	CARBON	10	5%	1/4W				FILM			
		IABLE RESISTO	-				CP01 CP02	1-235-977-11 1-235-977-11	NETWORK, RES			
RV501 RV502	1-228-991-00 1-230-630-11								TRIMMER			
RV601	1-228-990-00	RES, ADJ, CA	RBON 1K				CT01	1-141-181-11				
	SPA	RK GAP					 		·			
SG801	1-519-063-XX	DISCHARGING (	SAP.				 		DIODE			
<u>TRANSFORMER</u> T601 <u>↑</u> 1-448-961-11 S.R.T						D01 D02 D03 D04	8-719-109-89 8-719-110-36 8-719-911-19 8-719-109-69	DIODE RD5.6E DIODE RD13ES DIODE 1SS119 DIODE RD3.6E	-B2 S-B2			
T602 Æ	1-424-011-11 1-437-090-00	TRANSFORMER,	PUCSE				D07     D08	8-719-109-96 8-719-109-96	DIODE RD6.8E			
	TER	MINAL PIN						<u>1C</u>				
TP91	*1-535-084-00	<del></del>	PIN				1001		IC MAB8461P-	w136		
	*****			****	*****	*****	1002	8-759-972-96 8-759-946-85	IC SAA5231-V IC SAA5243E			
	*A-1347-014-A	V BOARD, COME	LETE				IC04		IC UPD4364CX	-15L		
		******						<u>C01</u>	L			
	CAP	ACITOR					   LO1	1-408-411-00	- INDUCTOR	15UH		
CO1	1-126-101-11	ELECT	100MF		20%	16V	L02 L03	1-410-468-11 1-410-468-11	INDUCTOR INDUCTOR	6.8UH 6.8UH		
C02 C03	1-124-120-11 1-124-119-00	ELECT ELECT	220MF 330MF		20% 20%	16V 16V	L04   L05	1-410-468-11 1-410-468-11	INDUCTOR INDUCTOR	6.8UH 6.8UH		
C04 C05	1-124-477-11 1-126-101-11	EL ECT EL ECT	47MF 100MF		20% 20%	16V 16V	   L06	1-410-468-11	INDUCTOR	6.8UH		
C06 C07 C08	1-124-120-11 1-124-499-11 1-102-951-00	ELECT ELECT CERAMIC	220MF 1MF 15PF		20% 20% 5%	16 V 50 V 50 V		TRA	NSISTOR			
C09 C10	1-102-074-00	CERAMIC CERAMIC	0.001M 470PF	F	10% 5%	50V 50V	Q01 Q02	8-729-904-27 8-729-177-43	TRANSISTOR 2 TRANSISTOR 2			
C11	1-110-182-81	MYLAR	0.022M	F	10%	250 <b>v</b>	Q03 Q04	8-729-900-80 8-729-178-54	TRANSISTOR D TRANSISTOR 2	TC114ES		
C12 C13	1-102-980-00 1-102-973-00	CERAMIC CERAMIC	270 PF 100 PF		5% 5%	50 V 50 V	Q05	8-729-177-43	TRANSISTOR 2	SD774		
C14 C15	1-102-951-00 1-102-961-00	CERAMIC CERAMIC	15PF 27PF		5% 5%	50 V 50 V	Q06   Q07	8-729-178-54 8-729-178-54	TRANSISTOR 2 TRANSISTOR 2	SC2785		
C16 C17 C18	1-110-190-81 1-110-171-81 1-102-953-00	MYLAR MYLAR CERAMIC	0.01MF 0.047M 18PF		10% 10% 5%	400 V 100 V 50 V	Q09   Q10   Q11	8-729-117-54 8-729-117-54 8-729-117-54	TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR 2	SA1175		
-		JE1111140			- 70		,					



											<u> </u>	<b>⊣</b> ∟
1-215-867-00   METAL OXIDE   470   5%   14   12   1-216-10-11   IECT   100MP   20%   16V   100   1-216-10-10   100   1	Ref.No. Part No.	Description				Remark	Ref.No.	Part No.	Description			Remark
1-29-417-11   CARBON   IK   5K   1/4W   C1411   1-123-87-11   ELECT   10MF   20X   50V   10V	R01 1-215-867-00 R02 1-249-425-11 R04 1-215-867-00	METAL OXIDE CARBON METAL OXIDE	4.7K 470	5% 5%	1/4W 1W		C1407 C1408 C1409	1-124-477-11 1-126-101-11 1-124-908-11	ELECT ELECT ELECT	47MF 100MF 22MF	20% 20% 20%	16V 16V 50V
R14   1-249-405-11   CARBON   100   5%   1/4W   C1416   1-124-1902-00   ELECT   0.47MF   20%   50V   164V   C1416   1-124-1902-10   ELECT   270MF   20%   164V   C1417   1-124-1902-10   ELECT   270MF   270M	R06 1-249-417-11 R07 1-249-405-11 R08 1-249-411-11	CARBON CARBON CARBON	1K 100 330	5% 5% 5%	1/4W 1/4W 1/4W		C1412 C1413 C1414	1-124-477-11 1-124-477-11 1-123-875-11	ELECT ELECT ELECT	47MF 47MF 10MF	20% 20% 20%	16V 16V 50V
R16   -129-492-10   CABBON   18   52   1/4W   C1419   -102-112-00   CERMIC   330PF   10%   50V   R17   1-253-477-11   CABBON   18   55   1/4W   C1419   -102-112-00   CERMIC   330PF   10%   50V   R17   1-253-477-11   CABBON   18   55   1/4W   C1419   -102-112-00   CERMIC   330PF   10%   50V   R17   1-253-477-11   CABBON   18   55   1/4W   C1412   -125-477-11   CLCT   47MF   20%   50V   R19   1-293-411-11   CABBON   330   5x   1/4W   C1427   -110-182-81   MYLAR   0.022MF   10%   250V   R19   1-243-399-11   CABBON   33   5x   1/4W   C1427   -1124-902-00   CLCT   0.47MF   20%   50V   R17   1-243-399-11   CABBON   33   5x   1/4W   C1427   -110-1003-00   CLCT   0.47MF   20%   50V   R19   1-251-300-00   METAL   120   5x   1/4W   C1427   -110-1003-00   CERMIC   0.0047MF   50V   R19   1-251-300-00   METAL   120   5x   1/4W   C1427   -110-1003-00   CERMIC   0.0047MF   50V   R18   1-243-404-00   CABBON   100   5x   1/4W   C1431   -1124-902-00   CLCT   0.47MF   20%   50V   R18   1-243-404-00   CABBON   100   5x   1/4W   C1431   -1124-902-00   CLCT   0.47MF   20%   50V   R18   1-243-404-01   CABBON   100   5x   1/4W   C1431   -1124-902-00   CLCT   0.47MF   20%   50V   R18   1-243-404-01   CABBON   100   5x   1/4W   C1431   -1124-902-00   CLCT   0.47MF   20%   50V   R18   1-243-404-01   CABBON   100   5x   1/4W   C1431   -1124-902-00   CLCT   0.47MF   20%   50V   R18   1-243-404-01   CABBON   100   5x   1/4W   C1431   -1124-902-00   CLCT   0.47MF   20%   50V   R18   1-243-404-01   CABBON   100   5x   1/4W   C1431   -1124-902-00   CLCT   0.47MF   20%   50V   R18   1-243-404-01   CABBON   100   5x   1/4W   C1431   -1124-902-00   CLCT   0.47MF   20%   50V   R18   1-243-404-01   CABBON   100   5x   1/4W   C1431   -1124-902-00   CLCT   0.47MF   20%   50V   R18   1-243-404-01   CABBON   4.7%   5x   1/4W   C1431   -1124-902-00   CLCT   0.47MF   20%   50V   C1431   -1123-875-11   CLCT   0.00MF   10%   50V   C1431   -1124-902-00   CLCT   0.00MF   10%   50V   C1431   -1123-875-11   CLCT   0.00MF   10%   50V   C1431   -1124-902-00   CL	R13 1-249-405-11	CARBON	100	5%	1/4W		C1416	1-124-902-00	ELECT	0.47MF	20%	50 <b>v</b>
C1424   1-110-182-81   MYLAR   0.022MF   10%   250V   270   271   249-399-11   CARBON   33   5%   1/4W   C1426   1-124-902-00   ELECT   0.47MF   20%   50V   271   272	R16 1-249-420-11 R17 1-249-417-11 R18 1-249-425-11	CARBON CARBON CARBON	1.8K 1K 4.7K	5% 5% 5%	1/4W 1/4W 1/4W		C1419   C1421 	1-102-112-00 1-124-477-11	CERAMIC CERAMIC ELECT	330PF 47MF	10% 20%	50V 16V
R30 1-215-130-00 METAL 120 5% 1/4W   C1429 1-101-003-00 CERAMIC 0.0047MF 50V 50V 50V 50V 50V 50V 50V 50V 50V 50V	R20 1-215-146-00 R27 1-249-399-11 R28 1-249-399-11	METAL CARBON CARBON	560 33 33	5% 5% 5%	1/4W 1/4W 1/4W		C1424 C1425 C1426	1-110-182-81 1-124-902-00 1-124-902-00	MYLAR ELECT ELECT	0.022MF 0.47MF 0.47MF	10% 20%	250 <b>v</b> 50 <b>v</b> 50 <b>v</b>
R34 1-249-407-11 CARBON 1K 5% 1/4W 279-405-11 CARBON 1D 5% 1/4W C1436 1-102-074-00 CERAMIC 0.001HF 10X 50V 1640 1-249-405-11 CARBON 820 5% 1/4W C1436 1-102-074-00 CERAMIC 0.001HF 10X 50V 1640 1-249-425-11 CARBON 4.7K 5% 1/4W C1501 1-123-875-11 ELECT 10MF 20X 50V R43 1-249-431-31 CARBON 4.7K 5% 1/4W C1501 1-123-875-11 ELECT 10MF 20X 50V R43 1-249-431-31 CARBON 4.7K 5% 1/4W C1503 1-108-614-91 MYLAR 0.001MF 10X 50V R44 1-249-431-31 CARBON 4.7K 5% 1/4W C1503 1-108-614-91 MYLAR 0.001MF 10X 100V R44 1-249-431-31 CARBON 4.7K 5% 1/4W C1503 1-108-614-91 MYLAR 0.001MF 10X 100V R46 1-247-779-00 CARBON 6.8 5% 1/4W C1507 1-108-620-91 MYLAR 0.0033MF 10X 50V C1508 1-123-875-31 ELECT 10MF 20X 50V C1511 1-123-875-31 ELECT 10MF 20X 50V C1511 1-123-875-31 ELECT 10MF 20X 50V C1511 1-123-875-31 ELECT 10MF 20X 50V C1511 1-123-875-31 ELECT 10MF 20X 50V C1511 1-123-875-31 ELECT 10MF 20X 50V C1511 1-123-875-31 ELECT 10MF 20X 50V C1513 1-102-95-00 CERAMIC 820PF 10X 250V C1513 1-102-95-00 CERAMIC 820PF 10X 250V C1513 1-102-95-00 CERAMIC 820PF 10X 50V C1513 1-102-	R30 1-215-130-00 R31 1-215-130-00 R32 1-215-130-00	METAL METAL METAL	120 120 120	5% 5% 5%	1/4W 1/4W 1/4W		C1429 C1430 C1431	1-101-003-00 1-102-112-00 1-124-902-00	CERAMIC CERAMIC ELECT	0.0047MF 330PF 0.47MF	20%	50V 50V 50V
R41 1-249-413-11 CARBON 470 5% 1/4W C1503 1-103-614-91 MYLAR 0.001MF 10% 100V R44 1-249-413-11 CARBON 470 5% 1/4W C1503 1-103-614-910-11 ELECT 47MF 20% 50V R44 1-249-413-11 CARBON 470 5% 1/4W C1503 1-103-614-910-11 ELECT 47MF 20% 50V R44 1-249-413-11 CARBON 470 5% 1/4W C1503 1-103-614-910-11 ELECT 47MF 20% 50V R44 1-249-413-11 CARBON 6.8 5% 1/4W C1503 1-103-614-910-11 ELECT 10MF 20% 50V C1503 1-123-875-11 ELECT 10MF 20% 50V C1513 1-123-875-11 ELECT 10MF 20% 50V C1513 1-123-875-11 ELECT 10MF 20% 50V C1514 1-110-183-81 MYLAR 0.0068MF 10% 400V C1515 1-102-117-00 CERAMIC 33PF 5% 50V C1514 1-110-183-81 MYLAR 0.027MF 10% 250V C1514 1-110-183-81 MYLAR 0.027MF 10% 250V C1515 1-102-117-00 CERAMIC 820PF 10% 250V C1515 1-102-117-00	R34 1-249-417-11 R37 1-249-405-11 R38 1-249-416-11	CARBON CARBON CARBON	1K 100 820	5% 5% 5%	1/4W 1/4W 1/4W		   C1433   C1436   C1437	1-126-101-11 1-102-074-00 1-102-074-00	ELECT CERAMIC CERAMIC	100MF 0.001MF 0.001MF	20% 10% 10%	16V 50V 50V
R46	R41 1-249-413-11 R43 1-249-425-11 R44 1-249-413-11	CARBON CARBON CARBON	470 4.7K 470	5% 5% 5%	1/4W 1/4W 1/4W		C1502 C1503 C1504	1-123-875-11 1-108-614-91 1-124-910-11	ELECT MYLAR ELECT	10MF 0.001MF 47MF	20% 10% 20%	50V 100V 50V
RV01   1-230-624-51   RES, ADJ, CARBON 220   C1512   1-110-188-81   MYLAR   0.0068MF   10%   400V   C1513   1-102-963-00   CERAMIC   33PF   5%   50V   C1514   1-110-183-81   MYLAR   0.027MF   10%   250V   C1514   1-110-183-81   MYLAR   0.0068MF   5%   50V   C1514   1-110-183-81   MYLAR   0.0027MF   10%   250V   C1514   1-110-183-81   MYLAR   0.0027MF   10%   250V   C1513   1-102-117-00   CERAMIC   33PF   5%   50V   C1514   1-110-183-81   MYLAR   0.0027MF   10%   250V   C1513   1-102-117-00   CERAMIC   32PF   10%   250V   C1515   1-102-117-00   CERAMIC   32PF   10%   250V   C1403   1-560-290-00   PLUG, CONNECTOR (2.5MM)   5P   CN1403   1-561-534-41   SOCKET 21P   CN1403   1-561-534-41   SOCKET 21P   CN1403   1-561-541-41   SOCKET 21P   CN1403   1-561-534-41   SOCKET 21P   CN1403   1-561-541-41   SOCKET 21P   CN1403   1-561-541-41   SOCKET 21P   CN1403   1-561-541-41   SOCKET 21P   CN1403   1-561-641-11   CONNECTOR 4P   CN1403   1-102-117-00   CERAMIC   CN1404   1-104   CN1404	R46 1-247-779-00	CARBON	6.8				C1507 C1508 C1509	1-108-620-91 1-123-875-11 1-124-499-11	MYLAR ELECT ELECT	0.0033MF 10MF 1MF	10% 20% 20%	100V 50V 50V
V1	RV01 1-230-624-51	RES, ADJ, CAI	_	20			C1513 C1514	1-102-963-00 1-110-183-81	MYLAR CERAMIC MYLAR	33PF 0.027MF	5% 10%	50 <b>v</b> 250 <b>v</b>
V2   x1-560-125-00   PLUG, CONNECTOR (2.5MM) 5P   CONNECTOR (2.5MM) 5P   V3   x1-560-126-00   PLUG, CONNECTOR (2.5MM) 6P   V4   x1-560-123-00   PLUG, CONNECTOR (2.5MM) FITCH)   CN1401 1-536-996-11   TERMINAL BOARD, INPUT/OUTPUT   CN1402 1-561-534-41   SOCKET 21P   CN1403 1-561-534-41   SOCKET 21P   CN1403 1-561-534-41   SOCKET 21P   CN1403 1-561-534-41   SOCKET 21P   CN1403 1-561-534-41   SOCKET 21P   CN1403 1-561-534-41   SOCKET 21P   CN1403 1-561-534-41   SOCKET 21P   CN1403 1-561-534-41   SOCKET 21P   CN1403 1-561-648-892-41   PLUG, CONNECTOR 3P   CN325 x1-564-892-41   PLUG, CONNECTOR 3P   CN345 x1-564-893-11   PLUG, CONNECTOR 4P   CN345 x1-564-893-11   PLUG, CONNECTOR 5P   CN345 x1-564-894-11   PLUG, CONNECTOR 5P   CN345 x1-564-894-11   PLUG, CONNECTOR 5P   CN367 x1-564-893-11   PLUG, CONNECTOR 4P   CN367 x1-564-893-11   PLU			<b>.</b>	5 ·	•		C1515 	1-102-117-00	CERAMIC	820PF	10%	50 <b>v</b>
V5	V2 *1-560-125-00 V3 *1-560-126-00	PLUG, CONNECT PLUG, CONNECT	TOR (2. TOR (2.	.5MM) 5	5 P 6 P		001401			DD THRUT (O	170UT	
CRYSTAL  CRYSTAL  CRYSTAL  CRYSTAL  CNJ43 *1-564-893-11  CNJ45 *1-564-894-11  CNJ45 *1-564-894-11  CNJ45 *1-564-894-11  CNJ51 *1-566-641-11  CONNECTOR 4P  CNJ51 *1-566-641-11  CONNECTOR, HINGE (TAB) 18P  CNJ67 *1-560-721-21  PLUG, CONNECTOR 2P  CNJ67 *1-560-721-21  PLUG, CONNECTOR 4P  CNJ67 *1-560-721-21  PLUG, CONNECTOR 4P  ***********************************	V5 *1-560-290-00	PLUG, CONNEC	TOR (2.	.5MM P	ITCH)		CN1402   CN1403   CNJ25	1-561-534-41 1-561-534-41 *1-564-892-41	SOCKET 21P SOCKET 21P PLUG, CONNEC	TOR 3P		
X01 1-567-162-00 OSCILLATOR, CRYSTAL CNJ51 *1-566-641-11 CONNÉCTOR, HINGE (TAB) 18P X02 1-567-495-11 OSCILLATOR, CRYSTAL CNJ67 *1-560-721-21 PLUG, CONNÉCTOR 2P PLUG, CONNECTOR 4P CNJ142*1-564-893-11 PLUG, CONNECTO	CR	YSTAL					Ì		•			
*A-1371-373-A J1 BOARD, COMPLETE  *************************  CAPACITOR  C1401 1-123-875-11 ELECT 10MF 20% 50V D1406 8-719-110-04 DIODE RD7.5ES-B3 D1405 8-719-110-04 DIODE RD7.5ES-B3 D1405 8-719-110-04 DIODE RD7.5ES-B3 D1405 8-719-110-04 DIODE RD7.5ES-B3 D1405 8-719-110-04 DIODE RD7.5ES-B3 D1405 8-719-110-04 DIODE RD7.5ES-B3 D1405 8-719-110-04 DIODE RD7.5ES-B3 D1405 8-719-110-04 DIODE RD7.5ES-B3 D1406 8-719-110-04 DIODE RD7.5ES-B3 D1406 8-719-110-18 DIODE RD10ES-B3 D1406 8-719-110-18 DIODE RD10ES-B3 D1406 8-719-110-14 DIODE RD9.1ES-B3 D1406 8-719-110-04 DIODE RD7.5ES-B3 D1406 8-719-110-04 DIODE RD7.5ES-B3 D1406 8-719-110-04 DIODE RD7.5ES-B3 D1410 8-719-110-04 DIODE RD7.5ES-B3 D1410 8-719-110-04 DIODE RD7.5ES-B3	XO2 1-567-495-11 XO3 1-567-686-11	OSCILLATOR, OSCILLATOR,	CRYSTAL CERAMI	Ē			CNJ51 CNJ67 CNJ142	*1-566-641-11 *1-560-721-21	CONNECTOR, F PLUG, CONNEC	IINGE (TAB) 1 TOR 2P	.8P	
*********************************    D1401 8-719-110-04 D10DE RD7.5ES-B3     D1403 8-719-110-04 D10DE RD7.5ES-B3     D1404 8-719-110-04 D10DE RD7.5ES-B3     D1405 8-719-110-04 D10DE RD7.5ES-B3     D1406 8-719-110-04 D10DE RD7.5ES-B3     D1407 8-719-110-04 D10DE RD7.5ES-B3     D1408 8-719-110-04 D10DE RD7.5ES-B3     D1409 8-719-110-04 D10DE RD7.5ES-B3     D1409 8-719-110-18 D10DE RD10ES-B3     D1409 8-719-110-14 D10DE RD9.1ES-B3     D1409 8-719-110-04 D10DE RD7.5ES-B3     D1409 8-719-110-04 D10DE RD7.5ES-B3     D1410 8-71				*****	*****	******	İ	DIC	DDE			
C1401 1-123-875-11 ELECT 10MF 20% 50V   D1406 8-719-110-04 D10DE RD7.5ES-B3   D1402 1-126-103-11 ELECT 470MF 20% 16V   C1403 1-102-112-00 CERAMIC 330PF 10% 50V   D1407 8-719-110-18 D10DE RD10ES-B3   C1404 1-124-902-00 ELECT 0.47MF 20% 50V   D1408 8-719-110-14 D10DE RD10ES-B3   C1405 1-101-003-00 CERAMIC 0.0047MF 50V   D1409 8-719-110-04 D10DE RD7.5ES-B3   D1410 8-719-110-	*A-1371-373-A											
C1402 1-126-103-11 ELECT 470MF 20% 16V   C1403 1-102-112-00 CERAMIC 330PF 10% 50V   D1407 8-719-110-18 DIODE RD10ES-B3 C1404 1-124-902-00 ELECT 0.47MF 20% 50V   D1408 8-719-110-14 DIODE RD9.1ES-B3 C1405 1-101-003-00 CERAMIC 0.0047MF 50V   D1409 8-719-110-04 DIODE RD7.5ES-B3   D1410 8-719-110-04 DIODE RD7.5ES-B3		· · · · · · · · · · · · · · · · · · ·	1005		204	504	D1404 D1405	8-719-110-04 8-719-110-04	DIODE RD7.5E	S-83 S-83		
	C1402 1-126-103-11 C1403 1-102-112-00 C1404 1-124-902-00	ELECT CERAMIC ELECT	470MF 330PF 0.47M		20% 10%	16V 50V 50V	   D1407   D1408   D1409   D1410	8-719-110-18 8-719-110-14 8-719-110-04 8-719-110-04	DIODE RD10ES DIODE RD9.1E DIODE RD7.5E DIODE RD7.5E	-B3 S-B3 S-B3 S-B3		

Ref.No.	Part No.	Description				Remark	Ref.No.	. Part No.	Descripti	<u>on</u>			Remark
D1419 8 D1420 8 D1501 8	8-719-110-04 8-719-110-04 8-719-110-04 8-719-912-20 8-719-911-19	DIODE RD7.5E DIODE RD7.5E DIODE RD7.5E DIODE 1SS120 DIODE 1SS119	S-B3				R1447   R1448   R1450	1-249-440-11 1-249-409-11 1-249-409-11 1-249-413-11 1-249-413-11	CARBON CARBON CARBON	82K 220 220 470 470	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
D1504 8 D1505 8 D1506 8	8-719-911-19 8-719-911-19 8-719-000-12 8-719-110-85 8-719-911-19	DIODE 1SS119 DIODE 1SS119 DIODE MC931 DIODE RD36ES. DIODE 1SS119	-84				R1453 R1454 R1455	1-249-412-11 1-249-412-11 1-247-703-11 1-247-703-11	CARBON METAL METAL	390 390 180 180	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
IC1402 8		IC CXAll14P IC TEA2014A IC TEA2031A					R1502   R1503   R1504   R1505	1-249-433-11 1-249-434-11 1-247-895-00 1-249-435-11 1-249-433-11	CARBON CARBON CARBON CARBON	22K 27K 470K 33K 22K 470K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
	TRA	NSISTOR					R1509 R1510	1-247-887-00 1-249-426-11 1-249-417-11	CARBON CARBON	220K 5.6K 1K	5% 5% 5%	1/4W 1/4W 1/4W	
Q1401 8 Q1402 8	3-729-117-54 3-729-117-54	TRANSISTOR 25	SA1175 SA1175				R1512 	1-249-429-11 1-249-438-11	CARBON	10K 56K	5%	1/4W	
	RES	ISTOR				į	R1514   R1515   R1516	1-249-417-11 1-215-489-00 1-249-432-11 1-249-410-11	CARBON CARBON CARBON	1K 680K 18K 270	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R1402 1 R1403 1 R1404 1	-249-404-00 - <b>247-698-11</b> -249-437-11 -249-413-11 -249-429-11	CARBON CARBON CARBON CARBON CARBON	82 <b>68</b> 47K 470 10K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		   R1518   R1519   R1520   R1521	1-249-429-11 1-247-883-00 1-247-895-00 1-249-425-11	CARBON CARBON CARBON CARBON	10K 150K 470K 4.7K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
R1408 1 R1409 1 R1410 1	-247-895-00 -249-434-11 -249-413-11 -249-434-11 -249-413-11	CARBON CARBON CARBON CARBON CARBON	470K 27K 470 27K 470	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		RV1501	1-228-999-00		CARBON 470	)K	1/4W	
R1413 1 R1414 1 R1415 1	-249-437-11 -247-895-00 -249-437-11 -249-434-11 -249-434-11	CARBON CARBON CARBON CARBON CARBON	47K 470K 47K 27K 27K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	; ; ; ;	RV1503 RV1504 RV1505	1-228-994-00 1-228-995-00 1-228-990-00 1-228-999-00 1-228-995-00	RES, ADJ, RES, ADJ, RES, ADJ, RES, ADJ,	CARBON 10k CARBON 22k CARBON 1K CARBON 470	K K		
R1418 1 R1419 1 R1420 1	-247-738-11 -249-409-11 -249-409-11	CARBON CARBON CARBON CARBON CARBON	82 82 220 220 1K	5% 5% 5% 5%	1/4W 1/2W F 1/4W 1/4W	i	RV1507 RV1508 RV1509	1-230-504-11 1-228-994-00 1-228-999-00	RES, ADJ, RES, ADJ, RES, ADJ,	CARBON 220 CARBON 10K CARBON 470	K	******	*****
R1423 1- R1424 1- R1425 1- R1426 1-	-249-434-11 -249-434-11 -249-417-11 -249-417-11	CARBON CARBON CARBON CARBON	27K 27K 27K 1K 1K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	     	*	*1-625-205-11	*****				
R1427 1- R1428 1-	-249-417-11 -247-895-00	CARBON CARBON	1K 470K	5% 5%	1/4W 1/4W	į	C1401	1-126-105-11	ACITOR ELECT	1000MF		20%	35 V
R1429 1- R1430 1- R1433 1-	-247-895-00 -249-404-00 -249-409-11	CARBON CARBON CARBON CARBON	470K 82 220 10	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W F		C1402	1-126-105-11 CON	NECTOR	1000MF		20%	35 V
R1440 1- R1441 1- R1442 1-	-249-415-11 -249-415-11 -249-437-11	CARBON CARBON CARBON CARBON CARBON CARBON	10K 680 680 47K 47K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		CNJ23 * CNJ242*	1-564-893-11 1-564-893-11 <u>JAC</u> I	PLUG, CONNE	CTOR 4P CTOR 4P			
		CARBON	220	5 <b>%</b>	1/4W		J1401	1-507-806-00	JACK				
							D1401		ISTOR				
							R1402	1-215-144-00 1-215-144-00	METAL METAL		% %	1/4W 1/4W	

Н3	<b>H4</b>	KS

							L			•	
Ref.No. Part No.	Description			Remark	Ref.No.	Part No.	Description				Remark
*1-625-201-11 <u>CON</u>	H3 BOARD *******			}	C207   C213   C214   C217   C218	1-124-927-11 1-124-908-11 1-110-188-81 1-110-188-81 1-110-182-81	ELECT MYLAR MYLAR	4.7MF 22MF 0.0068MF 0.0068MF 0.022MF	2 1 1	0% 0% 0%	50V 50V 400V 400V 250V
CNH302*1-564-898-11 CNH303*1-564-892-41	PLUG, CONNEC				C219   C220   C221   C222   C223	1-110-182-81 1-108-620-91 1-108-620-91 1-110-182-81 1-110-182-81	MYLAR MYLAR	0.022MF 0.0033MF 0.0033MF 0.022MF 0.022MF	1 1	0% 0% 0%	250V 100V 100V 250V 250V
D1405 8-719-812-41 *4-348-208-00	HOLDER, LED;				C224   C225   C226   C227	1-110-190-81 1-136-173-00 1-136-173-00 1-110-182-81	FILM FILM MYLAR	0.01MF 0.47MF 0.47MF 0.022MF	5 5 1	% % 0%	400V 50V 50V 250V
\$1401 1-571-085-21 \$1402 1-571-085-21 \$1403 1-571-085-21 \$1404 1-571-085-21 \$1405 1-571-085-21	SWITCH, TACT SWITCH, TACT SWITCH, TACT SWITCH, TACT SWITCH, TACT SWITCH, TACT	ICLE ICLE		l	C228     C229   C230   C231   C232   C233	1-110-184-81 1-110-192-81 1-110-192-81 1-124-902-00 1-123-875-11 1-102-114-00	MYLAR MYLAR ELECT	0.033MF 0.015MF 0.015MF 0.47MF 10MF 470PF	1 1 2 2	0% 0% 0%	250V 400V 400V 50V 50V
\$1406 1-571-085-21 \$1407 1-571-085-21 \$1408 1-571-085-21 \$1409 1-571-085-21 \$1410 1-571-085-21	SWITCH, TACT SWITCH, TACT SWITCH, TACT SWITCH, TACT SWITCH, TACT	ICLE ICLE			C234 C235 C236 C237 C238	1-102-114-00 1-102-114-00 1-102-114-00 1-124-902-00 1-102-978-00	CERAMIC	470PF 470PF 470PF 0.47MF 220PF	1 1 2	0% 0% 0%	50V 50V 50V 50V 50V
\$1411 1-571-085-21 \$1412 1-571-085-21 \$1414 1-571-085-21	SWITCH, TACT SWITCH, TACT SWITCH, TACT	ICLE		l	   C239 	1-126-103-11		470MF	2	:0%	16V
****************					[ 	CON	NECTOR				
*1-625-202-11				İ		*1-562-370-21 *1-564-880-31			BOARD	18P	
*4-387-825-01	HOLDER, LED				 	010	DE				
CON CNH401*1-564-884-11 CNH403*1-564-880-31				İ	D201 D202 D205 D206	8-719-110-14 8-719-110-14 8-719-110-04 8-719-110-04	DIODE RD9.1E	S-B3 S-B3			
					i !	<u>IC</u>					
D1401 8-719-101-08 *4-387-801-01					   IC201 	8-759-013-17	IC TDA6200				
D1402 8-719-101-08 *4-387-801-01	DIODE SRIOSE HOLDER, LED;	)			 	TRA	NSISTOR				
D1403 8-719-101-08 *4-38/-801-01	DIODE SRIOSD	)			Q201 Q202	8-729-178-54 8-729-178-54	TRANSISTOR 2 TRANSISTOR 2				
10						RES	ISTOR				
IC1401 8-741-138-70		, ******	*****	*****	R201 R202 R203 R204	1-249-441-11 1-249-425-11 1-249-441-11 1-249-435-11	CARBON CARBON CARBON CARBON	33K 5	% % %	1/4W 1/4W 1/4W 1/4W	
*1-625-206-11	KS BOARD				R205     B206	1-249-435-11	CARBON			1/4W	
	ACITOR	0.4745	20%	F04	R206 R207 R208 R209	1-249-423-11 1-249-423-11 1-249-431-11 1-249-433-11	CARBON CARBON CARBON CARBON	3.3K 5 15K 5 22K 5	% %	1/4W 1/4W 1/4W 1/4W	
C202 1-124-902-00 C203 1-124-477-11 C204 1-124-902-00 C205 1-124-927-11 C206 1-124-477-11	ELECT ELECT ELECT ELECT ELECT	0.47MF 47MF 0.47MF 4.7MF 47MF	20% 20%	50V 16V 50V 50V 16V	R210 R211 R212 R213 R214	1-249-431-11 1-249-433-11 1-249-431-11 1-249-417-11 1-249-433-11	CARBON CARBON CARBON CARBON CARBON CARBON CARBON	100K 5 22K 5 15K 5 1K 5	% % %	1/4W 1/4W 1/4W 1/4W 1/4W 1/4W	
				ı			CUITOM	-cn 3	70	*/ 4M	



The components identified by shading and mark A are critical for safety.

Replace only with part number specified.

Ref.No.	Part No.	Description				Remark
R216	1-249-433-11	CARBON	22K	5%	1/4W	
R217	1-249-431-11	CARBON	15K	5%	1/4W	
R218	1-249-417-11	CARBON	1K	5%	1/4W	
R219	1-249-429-11	CARBON	10K	5%	1/4W	
R220	1-249-425-11	CARBON	4.7K	5%	1/4W	
R221	1-249-417-11	CARBON	1K	5%	1/4W	
R222	1-249-417-11	CARBON	1K	5%	1/4W	
R223	1-249-413-11	CARBON	470	5%	1/4W	
R224	1-249-413-11	CARBON	470	5%	1/4W	
R225	1-249-417-11	CARBON	1K	5%	1/4W	
R226	1-249-417-11	CARBON	1K	5%	1/4W	
R227	1-249-417-11	CARBON	1K	5%	1/4W	
R228	1-249-417-11	CARBON	1K	5%	1/4W	
R229	1-249-441-11	CARBON	100K	5%	1/4W	
R230	1-249-441-11	CARBON	100K	5%	1/4W	

#### MISCELLANEOUS

AL 1-451-311-21 DEFLECTION YOKE (SY-153E)

1-452-032-00 MAGNET, DISK; 10MM Ø

1-452-094-00 MAGNET, ROTATABLE DISK; 15MM Ø

1-503-642-21 SPEAKER

1-543-179-00 CORE, RING

△ 1-559-346-11 CORD, POWER (WITH CONNECTOR)

L901 & 1-426-325-11 COIL, DEMAGNETIZATION
T802 & 1-439-416-11 TRANSFORMER ASSY, FLYBACK
V901 & 8-733-224-05 PICTURE TUBE (A59JWC60X)

# ACCESSORIES AND PACKING MATERIALS

Part No.	Description	Remark
A-1470-844-A *4-381-155-01 *4-387-845-01 *4-387-846-01 *4-387-847-01	COMMANDER ASSY (RM-673) BAG, PROTECTION CUSHION (UPPER) (ASSY) CUSHION (LOWER) (ASSY) INDIVIDUAL CARTON	
4-482-524-71	MANUAL, INSTRUCTION	